

# THE *Computer Fair*

*Personal computers  
Home computing  
Small business systems*

**Earls Court, London**

**14-17 June 1984**

**Exhibition  
Guide  
80p**



Sponsored by

**YOUR  
COMPUTER**

**Practical  
Computing**

**micro  
business**

**COMPUTER  
CHOICE**

# KEMPSTON



## KEMPSTON PRO JOYSTICK INTERFACE.

'STATE OF THE ART' design with the following exciting features

- ★ Compatible with Kempston Joystick software (the industry standard).
- ★ Compatible with Sinclair/Psion software.
- ★ Compatible with cursor key software.
- ★ Compatible with ROM cartridge and cassette software.
- ★ Three 9 way D plugs for our Competition Pro range or standard Atari type joysticks.
- ★ Price includes VAT, p & p.

**KEMPSTON**

MICRO ELECTRONICS LTD  
 Unit 30 Singer Way,  
 Woburn Road Industrial Estate,  
 Kempston, Bedford, MK42 7AF  
 Tel: (0234) 856633

To Kempston Micro Electronics Ltd, Singer Way, Woburn Rd, Ind Est, Kempston, Bedford, MK42 7AF  
 Please send me the following \_\_\_\_\_  
 I enclose a cheque/P.O. for £ \_\_\_\_\_  
 Access/Board \_\_\_\_\_  
 Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 Postcode \_\_\_\_\_  
 Overseas add £4 \_\_\_\_\_

For ZX Spectrum

# Welcome to the Show!

## Big business at the Big Show

Two years ago, only one home in twenty owned a microcomputer. Last year it had doubled to one in ten — and sales are still rocketing. If the trend continues one home in every five will own a computer by the end of 1984. Or to put it another way, around 4 million households will have computers by the beginning of 1985.

That's a daunting thought and it would be even more daunting if those millions of computers were to be used solely to play shoot 'em up arcade games. Which is not to say that we have anything against such games — just that their function is primarily to entertain while the computers on which they run are capable of so much more — education, household administration and accounts and business applications, to name but a few potential uses.

What's more, just as a constantly growing body of software is extending the uses to which computers can be put, so too the power provided by low-cost computers and the facilities they offer, allow the computer owner to widen his horizons applying the computer to tasks which could not have been considered a few years ago.

The trends exemplified in Sinclair's powerful QL computer, in the Acorn dual processor system which makes CP/M available on the BBC computer and in the enhanced Dragon computer range, all indicate that the concept of the "home computer" is no longer adequate to describe the power which is now at the computer owner's fingertips.

That's why the Computer Fair is such a fascinating exhibition. Those who dismiss it as a collection of games freaks out for a good time will have missed the point. Games are important because they help to popularise computing, but they represent only one aspect of the computer scene. A wide range of software covering other tasks will be demonstrated and visitors who take the trouble to delve more deeply into the hardware and software on show will be rewarded by a view of computing which extends well beyond the amusement arcade.

The portion of the exhibition devoted specifically to business computing will be smaller than that devoted to home computing, but it will be no less significant in a fast-changing scene where today's home computer may tomorrow be running a suite of business programs.

## Business Day at the Computer Fair

The success of the half day devoted specifically to trade and business visitors at last year's Computer Fair, has encouraged us to extend the time allotted to serious business visitors to a full day. In consequence Thursday June 14 is the "Business Only" day when business visitors interested in the serious

application of microcomputers and software will be able to visit the show untroubled by the general public.

## Micro-mouse competition

The British finals of the Euromouse Maze Contest will be held during the Computer Fair. You will be able to see microcomputer-controlled mice racing, against the clock, to the centre of a maze. Less important than outright speed is the ability to proceed through the maze in an intelligent fashion, learning by experience. It's the mouse who knows where he's been and where he is at any given moment who is likely to get the centre fastest!

The sponsors would like to thank Acorn Computers for their generosity in donating prizes for the micro-mouse contest.

## Computer Clubs

Newcomers to computing wishing to find out more before buying a personal computer or wanting advice on computing problems should visit the various computer clubs and user groups located in Club Avenue on Stands C1 to C16.

## Sponsors and Organisers

The Computer Fair is sponsored by Practical Computing, Your Computer and Computer Choice.

Practical Computing is Britain's leading magazine for serious users of personal computers and small business systems. It has a mature readership, 75 per cent of its readers are over 21, while nearly half have a professional/business interest in personal computers.

Your Computer with an audited circulation of 122,642 copies is Britain's biggest selling home-computer magazine. It appeals to all using computers costing less than £500. Your Computer provides an informative mixture of hardware and software reviews, programming techniques, program listings to run on your own computer and an advice column to deal with readers' queries.

Computer Choice is specially designed to appeal to newcomers to computers who are looking for reliable advice about low-cost home computers, add-ons, games and software. It's lively, youthful style has already made it a favourite with many home computer users.

The Computer Fair is organised by Reed Exhibitions who, along with the sponsoring magazines, are members of Business Press International Ltd.

## Forthcoming Events

The Your Computer Christmas Fair, Olympia 2, London  
November 30-December 2, 1984.

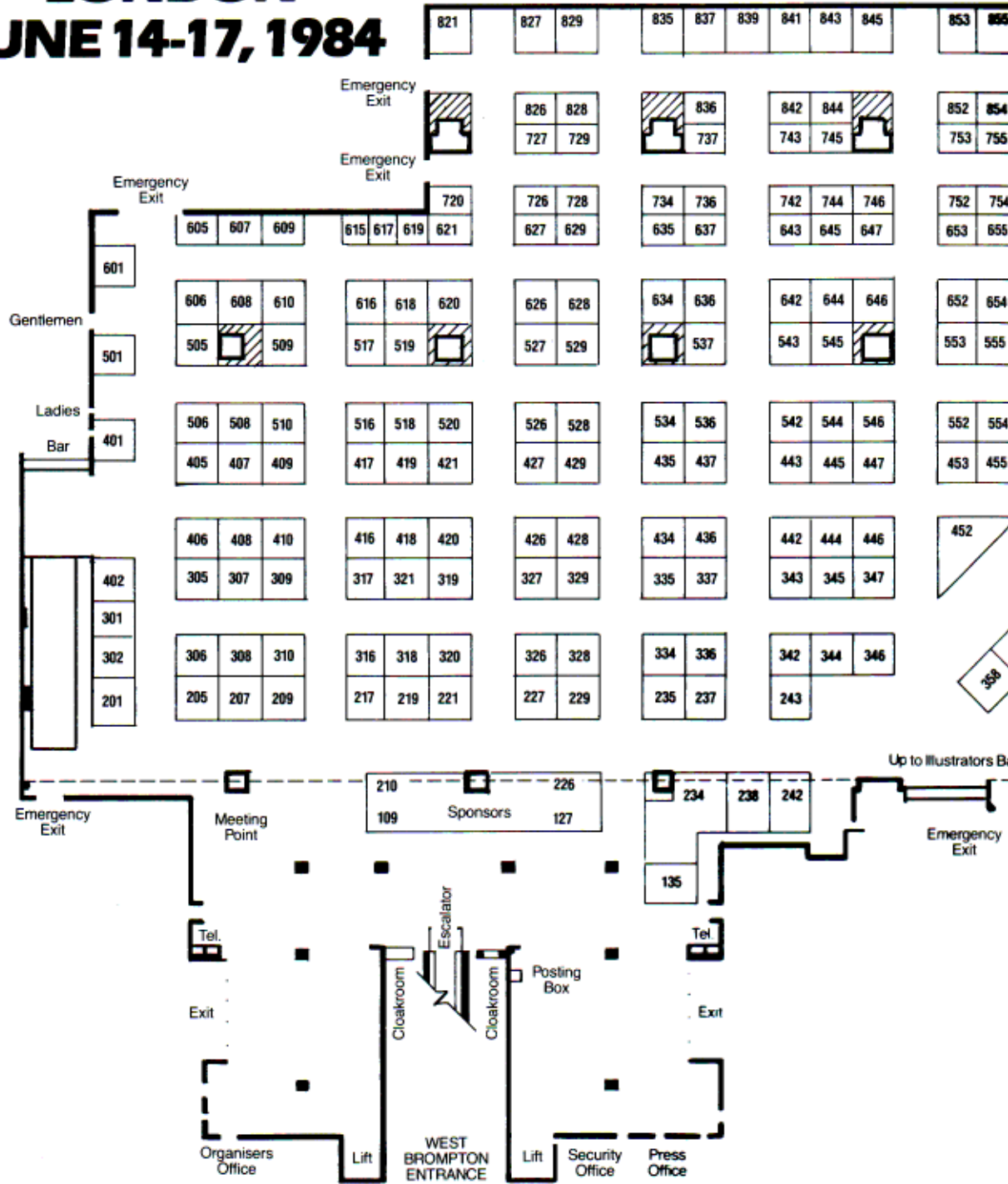
Opening Hours:  
Thursday June 14  
Friday June 15  
Saturday June 16  
Sunday June 17

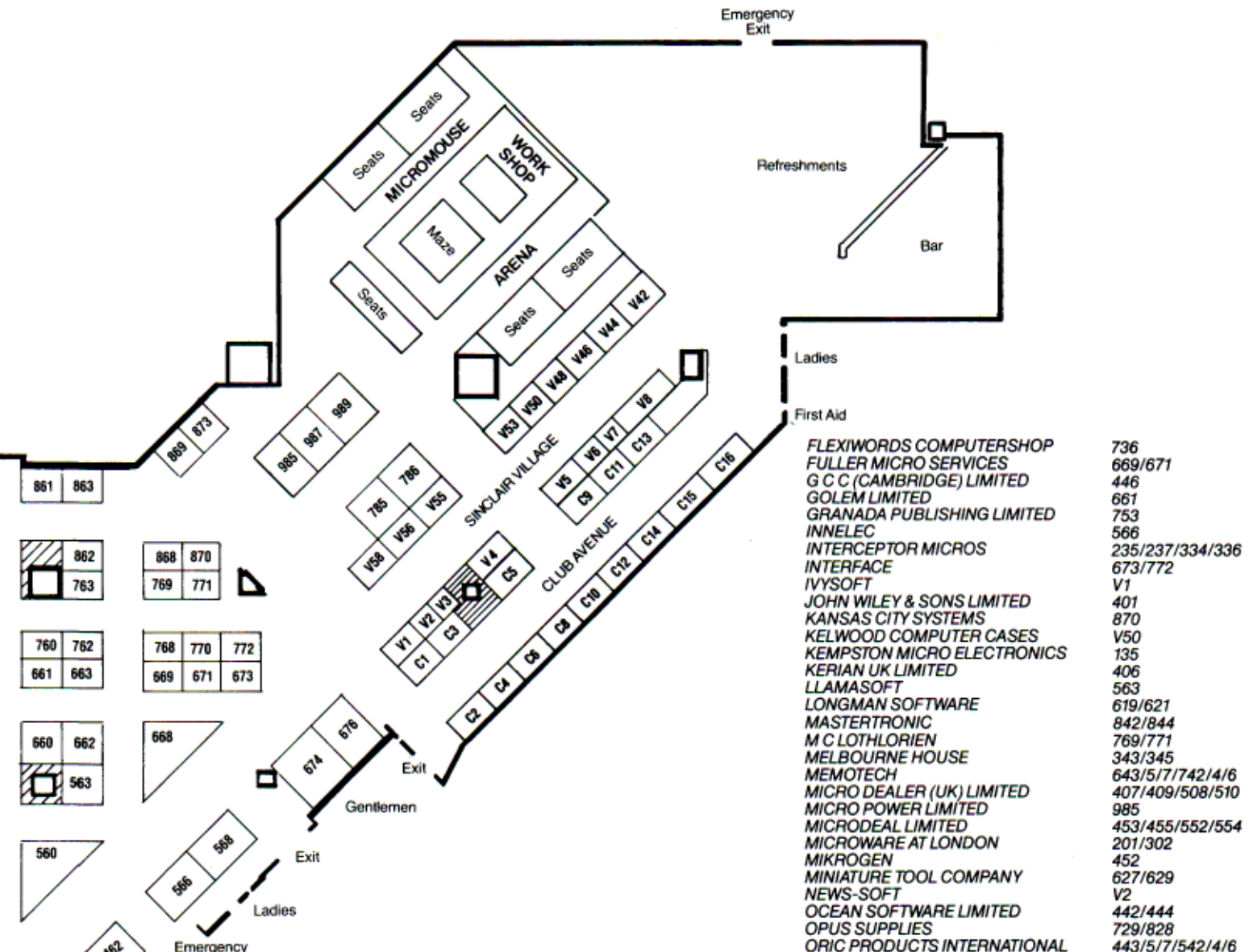
10 am - 6 pm  
10 am - 6 pm  
10 am - 6 pm  
10 am - 5 pm

# THE *Computer Fair*

*Personal computers  
Home computing  
Small business systems*

**EARLS COURT  
LONDON  
JUNE 14-17, 1984**





## LIST OF EXHIBITORS

A & F SOFTWARE	653/655
A E HEADEN LIMITED	V58
A G F HARDWARE	V5
ACORN COMPUTERS LIMITED	205/BLOCK
ADDICTIVE LIMITED	768
ADDISON-WESLEY PUBLISHERS LTD	835
ADVANCED MICRO COMPUTERS LTD	505
ANIROG COMPUTERS	543/545/642/644
ARCADE	V53
ARGUS PRESS SOFTWARE	752/754
ARTIC COMPUTING	435/437/534/536
BEEBUG PUBLICATIONS LIMITED	301
BERNARD BABANI PUBLISHING LTD	861
BEYOND SOFTWARE	841/843/845
BOOT OUT	762
BUG BYTE SOFTWARE	668
C J E MICROCOMPUTERS	410
C P SOFTWARE	V56
C/WP COMPUTERS LIMITED	527/529/626/628
CARNELL SOFTWARE LIMITED	763/862
CBS ELECTRONICS	427/429/853/855
CENTRE SOFT	229
CDS MICRO SYSTEMS	660/662
CHROMASONIC ELECTRONICS	227/326
COMMODORE BUSINESS MACHINES	217/317/BLOCKS
COMPUSOUND	V3
COMPUTER BOOKSHOP	358/360
COMPUTER JUNK SHOP	462
COMPUTER RENTALS LIMITED	568
CRYSTAL COMPUTING	663
D K TRONICS	674/676
DATA TECHNOLOGIES LIMITED	405
DATASOFTWARE LIMITED	637
DIGITAL INTEGRATION	V55
DISKING INTERNATIONAL	526/528
DOUBLEMODE LIMITED	786
DRAGON DATA LIMITED	417/BLOCK
ELECTRICAL-ELECTRONIC PRESS	109/127/210/226
ELECTRONEQUIP	646
EMAP PUBLICATIONS	869
ENCYCLOPAEDIA BRITANNICA INT.	786

FLEXIWORDS COMPUTERSHOP	736
FULLER MICRO SERVICES	669/671
G C C (CAMBRIDGE) LIMITED	446
GOLEM LIMITED	661
GRANADA PUBLISHING LIMITED	753
INNELEC	566
INTERCEPTOR MICROS	235/237/334/336
INTERFACE	673/772
IVYSOFT	V1
JOHN WILEY & SONS LIMITED	401
KANSAS CITY SYSTEMS	870
KELWOOD COMPUTER CASES	V50
KEMPSTON MICRO ELECTRONICS	135
KERIAN UK LIMITED	406
LLAMASOFT	563
LONGMAN SOFTWARE	619/621
MASTERTRONIC	842/844
M C LOTHLORIEN	769/771
MELBOURNE HOUSE	343/345
MEMOTECH	643/517/742/4/6
MICRO DEALER (UK) LIMITED	407/409/508/510
MICRO POWER LIMITED	985
MICRODEAL LIMITED	453/455/552/554
MICROWARE AT LONDON	201/302
MIKROGEN	452
MINIATURE TOOL COMPANY	627/629
NEWS-SOFT	V2
OCEAN SOFTWARE LIMITED	442/444
OPUS SUPPLIES	729/828
ORIC PRODUCTS INTERNATIONAL	443/517/542/4/6
OZWISE COMPUTERS	609
PHOENIX SOFTWARE	743/745
PICTURESQUE	V6
PILOT SOFTWARE	654
PRENTICE HALL INTERNATIONAL	873
PROTEK COMPUTING LIMITED	238/242
4 SYSTEMS	615
QUICKSILVA LTD	243/342/344/346
RAM ELECTRONICS	V4
RICOLL ELECTRONICS LIMITED	V8
ROMIK SOFTWARE	537/634/636
SAGA SYSTEMS	555
SPECIALISED EDUCATION SOFTWARE	
SERVICES LIMITED	760
SHARDS SOFTWARE	737
SILICON VALLEY COMPUTER CENTER	402
SINCLAIR RESEARCH LIMITED	327/335/BLOCKS
SPOOL LIMITED	836
STACK COMPUTER SERVICES	755
SUNSHINE PUBLICATIONS	347
TANSOFT LIMITED	553/652
TRANSFORM LIMITED	V7
U.S. GOLD LTD	328
VNU BUSINESS PUBLICATIONS BV	509/606/608/610
VORTEX SOFTWARE	785
WIDGET SOFTWARE	863
WYNDAWAYE SYSTEMS LIMITED	635

## COMPUTER CLUBS

THE ASSOCIATION OF COMPUTER CLUBS (ACC)	C2
INDEPENDENT COMMODORE PRODUCTS USER GROUP (ICPUG)	C1
BRITISH APPLE SYSTEMS USER GROUP (BASUG)	C3
INDEPENDENT QL USER GROUP/NATIONAL	
TRS & GENIE USER GROUP	C5
CLUBSPOT	C10
THE ASSOCIATION OF LONDON COMPUTER CLUBS	C6
THE 68 MICRO GROUP	C9
THE AMATEUR COMPUTER CLUB	C4
FORTH INTEREST GROUP (UK)	C11
CROYDON MICROCOMPUTER CLUB	C8

## A & F Software Stand Nos: 653, 655

Unit 8, Canalside Industrial Estate,  
Woodbine Street East,  
Rochdale, Lancashire  
Tel: Rochdale 341111

Sales contacts on stand:  
Mike Fitzgerald, Martin Hickling,  
Doug Anderson

The company has been trading approximately three years and during that time has grown significantly. The company was founded originally to supply software, that is program cassettes, for the BBC Micro's made by Acorn. Since that time, it has extended its product range and currently offers programs for the BBC, Electron, Spectrum, Dragon and Commodore 64.

At any one time, A & F Software has approximately 20 of its own cassettes. All its cassettes are games, and it aims to launch one new game every four to six weeks. It currently has over 20 distributors for its products, and 1,000 retail stockists. It is opening up new retail stockists all the time; big customers include Lewis's, Websters, Boots, W H Smiths, John Menzies. A & F is also in the export market - Sweden, Holland, France, Iceland, Falklands, Australia - and see this area as one of great potential.

## AGF Hardware Stand No: V40

26 Van Gogh Place,  
Bognor Regis,  
West Sussex PO22 2BY  
Tel: (0243) 823337

Sales contact on stand:  
A G Fosberry

The absolutely latest development in joystick customising interfaces for the ZX Spectrum makes its first public appearance. The new AGF Membrane Memory Interface utilises a totally new concept in programming. Unique preset custom-cards simply snap into place immediately aligning joystick or trackball control with absolutely any Spectrum game or utility, totally eliminating conventional memory access times and thus matching key press reaction by the computer of the controller movement.

Housed in a contemporary styled injection moulded case, it also features a computer reset switch for recovering from crashes or clearing out machine code programs with-

out the need to disconnect the power. Side entry of the controller plug eliminates flying leads obscuring vision and a rear expansion port will support the ZX Printer or more AGF Interfaces, allowing up to five individually programmed controllers on one Spectrum.

The Membrane Memory Interface comes supplied with five preset custom-cards for use with the following protocols: AGF/Protek, Sinclair 1, Sinclair 2, DK'tronics and Kempston. Blank cards can be programmed for use with software without joystick options so that a complete library of cards can be compiled for your software collection. Only AGF brings you customised control as easy as snap.

## Acorn Computers Stand Nos: 205, 207, 209, 306, 308, 310

Fulbourn Road, Cherry Hinton,  
Cambridge CB1 4JN  
Tel: (0223) 245200  
Telex: 817875

Acorn Computers makes the well-known BBC Microcomputer system and the Electron home computer. For these machines, Acorn has developed an extensive range of expansion options, including: 6502 and Z-80 second processors which upgrade the BBC Micro into, respectively, a high-speed graphics computer, exploited with Acorn's Bitstik - CAD device - and a professional CP/M business machine, complete with bundled applications and programming software; Prestel and teletext adaptors which enable the BBC Micro to handle viewdata and teletext broadcasts under program control, including the downloading of telesoftware; IEEE Interface for controlling networks of laboratory tests and measuring instruments; Econet, Acorn's low-cost, local area networking facility designed for schools and commercial applications.

For the Electron, the recently launched Plus 1 expansion is on show, adding printer, joystick and two ROM-cartridge interfaces.

Acornsoft will be demonstrating a range of over 100 software titles for the BBC Micro and Electron, in business, home and educational applications.

## Addictive Games

## Stand No: 768

7A Richmond Hill,  
Bournemouth BH2 6HE  
Tel: (0202) 296404  
Sales contact on stand:  
Naomi Wylde

Football Manager is an excellent football game for playing at home and away. It is already available for the ZX-81, Spectrum 48K and the BBC Micro. You can choose your own team colours and watch the results of your management skills in colourful graphics.

Kevin Toms and team will be kicking off by demonstrating the new version of Football Manager on the Commodore 64. Come over and see us on our stand.

## Addison-Wesley Publishers Stand No: 835

53 Bedford Square,  
London WC1B 3DZ  
Tel: 01-631 1636  
Telex: 8811948

Sales contacts on stand:  
Pat Bitton, Josette Garcia,  
Jackie Winspear

Addison-Wesley Publishers are showing their complete range of books on a variety of popular micro-computers: Apple, Atari, BBC Micro/Electron, Commodore, Dragon, Epson, IBM PC, Tandy, Texas Instruments and ZX-81/Spectrum. Plus many other non-machine-specific titles to appeal to all ages, interests and levels of ability.

We are also showing the first of a series of exciting new graphics packages for the BBC Micro/Electron from a mystery design team calling themselves Hallam. Whatever your interest, we're sure to have something to help you make the most of your machine.

And in the unlikely event that we don't, perhaps you could write it for us - we're always on the lookout for exciting new book or software publishing ideas, so if you've got an idea for the next computing bestseller, come and tell us about it. We look forward to seeing you there.

## Advanced Micro Computers Stand No: 505

56a Grove Road,

**Sutton, Surrey SM1 1BT**

**Tel: 01-661 7611**

**Sales contact on stand:**

**Kim Shrsobree**

AMC has amalgamated expertise from many fields in the computing world to give a complete service, supplying hardware; software, both bespoke and custom-written; maintenance; training and consumables.

AMC are IBM Authorised Dealers and it is their experience in both large and small installations which, together with a reliable back-up service, enable them to provide a complete across the board approach.

AMC also market the Hitachi Personal Computer. This IBM-compatible system incorporates a 2-year, on-site maintenance warranty in the price of just £1995 for a complete colour system. AMC also offer a custom-written software service and a training program covering many packages designed to meet both individual and corporate needs and skills from beginner to expert.

AMC hold weekly seminars and open evenings at our Sutton showroom which are completely free of charge and obligation.

## **Anirog Software**

**Stand Nos:**

**543, 545, 642, 644**

**29 West Hill, Dartford,**

**Kent DA1 2EL**

**Tel: (0322) 92518**

**Sales contact on stand:**

**Lynne Taylor**

Anirog has earned its reputation as one of the leading suppliers of Vic-20 and CBM 64 software by consistently producing challenging, exciting games at a price that everyone can afford. This month sees the release of four new arcade games for the Commodore 64, Petch, Ice Hunter, Bongo and House of Usher, all of which continue the tradition of Anirog quality graphics combined with excellent game content to satisfy the expectations of the most dedicated games devotee.

Featured at the show is the Artkit and Music Synthesiser, £14.95, a graphics and sound package that enables the user to produce colourful high-resolution displays, design and control moving objects — like sprites, but without their size restrictions — and develop their own musical compositions. These comprehensive facilities can later be incorporated into the user's own programs and games.

All CBM 64 software is equipped

with the Anirog turbo-loader and is available either on disc, £9.95, or cassette. Come and visit us on our stand and take advantage of the special exhibition offers.

## **Arcade Software**

**Stand No: V53**

**Technology House,  
32 Chislehurst Road,  
Orpington, Kent BR6 0DG  
Tel: Orpington (66) 35639  
Sales contact on stand:  
N Jones, B Rutherford**

This exciting company has been formed by the bringing together of technical and financial expertise to provide quality programs for the Spectrum 48K. With this in mind we proudly present The Prize, which is a most amazing game. Set on another planet and armed with laser pulse torpedoes, your aim is to discover the innermost chamber of Midas. If you do, you could win up to £5,000.

Details are available from our stand in Sinclair Village where the highly praised Bubble Trouble will also be on display. Arcade is a year old, and to celebrate this fact we have a special show price of just £3 each cassette.

Dealers please ask for our very special Intro-pack which offers phenomenal savings.

## **Argus Press**

**Software**

**Stand Nos: 752, 754**

**1 Golden Square,**

**London W1 3AB**

**Tel: 01-437 0626**

**Telex: 8811896**

**Sales contact on stand:**

**Mike Daniels**

ASP Software — Adventure war-game specialists. With top ten games to its credit, like The Valley, it is exhibiting its much publicised war-game The Fall of Rome. Launched in May, it is rapidly becoming the war-game of the year. Preventing the collapse of civilisation is a challenge and a half!

Mind Games — a new range under the Argus umbrella. An exciting collection of strategy and adventure games with terrific presentation. Launched for the show are the first in the series, Star Force 7, Quest for Eternity and Ellacks Tomb. Multi-screen graphics, battle adventure and strategy games with a difference.

Clever Clogs — early learning games. For age groups from 3+ to 9+, the games encourage and back-up schoolwork by being such fun. There are eight titles with three data tapes which feed into the master games and keep up the challenge. The series has hit the top-ten charts and has had great reviews. Much more than just educational software.

Tape magazines — on sale nationally for five machines. With circulation increasing with each bi-monthly issue, Argus tape magazines have created a standard and a whole new market. Available for Vic-20, Spectrum, Atari, BBC, CBM 64 machines. Games, reviews, utilities, features all add up to a value-for-money package with at least a 100K of program on each issue. Without doubt one of the largest selling packages of software in the U.K. today.

## **Artic Computing**

**Stand Nos:**

**435, 437, 534, 536**

**Main Street, Brandesburton,  
Drifffield, Humberside YO25 8RL**

**Tel: (0401) 43553**

**Telex: 52215**

**Sales contact on stand:**

**Andy Nutter**

As one of Britain's leading software houses, Artic is presently involved in producing a new range of high quality programs to compliment its recent successes. These include Bear Bover on the Spectrum 48K and Commodore 64, Dancing Feats and Adventures A, B, C, D and E. As well as all these, all time favourites Galaxians, St Andrews (Golf), Snooker and Gobbleman.

At Artic we are proud to provide one of the most comprehensive ranges of products to suit all types of market: utility, education, arcade and adventure games. We are always willing to examine original ideas for potential markets in this over expanding industry. In order to meet the challenge of producing the best range of software, we have recently employed more staff for research and development. Richard Turner and his team now feel that 1984/85 will bring greater rewards than ever before.

## **Beebug**

**Stand No: 301**

**Beebug Publications,  
PO Box 50, St Albans,  
Hertfordshire**





# SYSTEMS LIMITED

Woodham Road,  
Woking, Surrey  
(04862) 69527

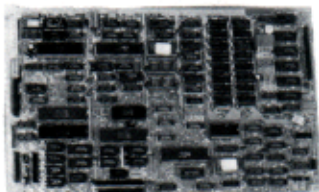
ASK FOR  
DAVID OR  
CAROL

## 8 bit CP/M\*2-2+ 64-128K

The ZED Z80 Card available with:

- Z80A 4Mhz CPU
- 64K or 128K RAM on board

### 16 BIT NOW AVAILABLE



**£395.00**

NORMAL RRP £495  
QUANTITY DISCOUNTS

\*CP/M is the trademark of Digital Research

- On board 24 x 80 VDU
- 4K System Monitor
- 4K Character Generator ROM
- Teletext Graphics
- CRT Controller
- Floppy Disk Controller for 5.25" or 8" Drives inc. High Density 77 track 5.25" Floppies
- SASI - Industry Standard Hard Disk Interface
- 2 Channel RS232c
- 2 Port Parallel
- On Board Real Time Clock Calendar with battery Back-up
- External I/O BUS
- ASCII Keyboard Port
- Size: 357mm x 225mm



JOIN OUR MAILING LIST NOW

8186 16BIT MS DOS MULTI USER CPM CONCURRENT NOW AVAILABLE

## APPLE II(e) Compatible Keyboard

SPECIAL FAIR OFFER  
**£85.00**  
RRP £95

Another exciting product being launched by Saga from this exhibition is an Apple II compatible keyboard. Providing all of the standard 128 ASCII characters, number pad and a further 15 special cursor and function keys: Save, Load, PR#6 <Return>, Catalogue, List, Run, Init, Call-151 <Return>, PR#1 <Return>, Dir, Home, ↑, ↓, → and ←. Further details and examples available now, ask for David or Carol.



OTHER APPLE KEYBOARDS AVAILABLE

OEM's, RETAILERS DISTRIBUTORS Contact us NOW

# SIMPLY THE BEST

# SPECTRUM USERS!

- Remove 5 screws
- Separate Spectrum
- Remove tails
- Screw Spectrum to base
- Insert keyboard tails
- Screw keyboard to base
- Secure Housing Facia

SCREWDRIVER  
+  
5 MINUTES

SAGA II  
EMPEROR



The ZX Spectrum is the best Homecomputer for Software, both educational and games. The main flaw, is of course, the keyboard. This classic keyboard housing is designed to accommodate the Spectrum personal computer.

A professional full size 'Qwerty' keyboard has been designed, with full travel keys & a full size space bar. Special functions are strategically placed for rapid programming & ease of use. Designed today for users of tomorrow, you can play the fastest games with the greatest of ease. It's easy to assemble too - you need 1 screwdriver & 5 minutes - Simple! Available in white.

67 KEYS!  
AVAILABLE EX STOCK

If you are not entirely satisfied with any of our products please return and we will refund your money and postage. All prices include VAT

FAIR PRICE  
**£49.00**  
RRP 54.45

**SAGA SYSTEMS LTD**

WOODHAM RD, WOKING, SURREY TEL 69527

TRY OUR **NEW SOUND BOOST** FOR THE SPECTRUM  
Sound volume adjustable from a whisper to a roar providing sound and vision for added realism. No memory used, pushes the sound out through the T.V. No soldering required, just 3 easy push on connections. **£9.50** P&P FREE

PLEASE RUSH ME WITHOUT DELAY  
I ENCLOSE CHEQUE/PO PAYABLE TO SAGA SYSTEMS LTD FOR £ \_\_\_\_\_ PLEASE ADD £1.15 P&P PER KEYBOARD P&P FREE FOR BEEP BOOST

NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_ POSTCODE \_\_\_\_\_



Tel: (0727) 62613

Sales contact on stand:  
Sheridan Williams

Do you have a BBC or an Electron computer? If so, you must come and see our unique range of quality software. Beebug and Elbug are independent national user groups for the BBC and Electron computers respectively, and cater exclusively for users of these machines. You may join Beebug or Elbug at the stand and benefit immediately from the huge discounts on software that we offer to members.

Other benefits of membership are: Magazine — members receive regular monthly mailings, 10 per year. The magazine contains programs, articles, news, reviews and the ever popular hints and tips.

Magazine cassette — a cassette containing all the programs at a special price for members.

Discount scheme — an extensive discount scheme with major retailers on hardware, software and books. Discounts of up to 25 per cent are available.

Software library — our software library contains some unique and exciting software.

Special offers — we have negotiated special offers on software and other items. For example, the word processor Wordwise is available to members at £38 including VAT; it normally costs £46.

To see our software, or to join Beebug or Elbug, come to the stand or write for further details and an application form to the above address.

## Bernard Babani (Publishing) Stand No: 963, 861

The Grampians,  
Shepherds Bush Road,  
London W6 7NF

Sales contacts on stand:  
Michael Babani, Pauline Pragnell

We will be showing our entire range of inexpensive — approximately £1.95 — paperback computer books. Our books cover most of the popular machines including the Spectrum, Oric, Dragon, Electron, BBC, Commodore 64 and Atari Micros.

We also have a number of titles covering add-on projects and interfacing as well as chip-specific books like "The Z-80 Workshop Manual", together with many general and introductory computing titles. We have just produced a brand new

catalogue which is available free by visiting our stand. We are confident that our books offer you the finest value in the fair — do not miss them.

## Beyond Stand Nos: 843, 845, 841

2 St John's Place,  
St John's Square, London EC1  
Tel: 01-251 8496/7

Take a trip into the Beyond . . . And discover for yourself the wintry 'lands of Midnight, portrayed in 32,000 different panoramic vistas. Learn why the Epic game is everything you ever wanted from a fantasy adventure, plus a whole lot more.

Psytron came from the Beyond and shot up the charts provoking the biggest interest of any computer game released since Christmas. What lies Beyond Psytron and Lords of Midnight? A wealth of computer dreams are about to be realised. Many will be with you before September.

## Boot Out Stand No: 762

PO Box 147,  
Putney, London SW15 1AU  
Tel: 01-788 1454  
Sales contact on stand:  
Tony Bennett

Boot Out is a newly formed company wholesaling and retailing a wide range of micro computer software. The major part of its trading will concern itself with the purchase of surplus and overstocks from the trades manufacturing and related software houses on both sides of the Atlantic.

To complement its wholesale operation it will retail the software at trade venues throughout the UK and selected venues on the continent. All enquiries should be directed to Tony Bennett on the stand or write direct to him at the above address. All enquiries will be treated in the strictest confidence.

## British Apple Systems User Group (BASUG) Stand No: C3

P.O. Box 174,

Watford WD2 6NF

Tel: 0344 483713  
Sales contact on stand:  
Frank Everett

BASUG is the UK National Apple user group. It is completely independent, non-profit making and has among its members companies and educational bodies as well as home users.

The group produces a bi-monthly journal, "HARDCORE" which contains reviews of Apple-related products, members letters, want adverts, programming suggestions, solutions to problems as well as local group information.

Available to members:  
The Software Library — over 100 non-copyright discs at a nominal cost.

Special Release Software — High standard programs at low cost.

The Literature Library — A mine of Apple related information.

Courses — Professional standard at low cost on a wide range of subjects.

Workshops — Full day get togethers with an emphasis on a specific subject.

HOT LINE — Telephone HELP service.

Other benefits — Blank discs at special rates, 24 Hour Bulletin Board, Prestel user group, Local groups.

Meet us at the show, write to us at the above address or phone for further information on the group. (Calls between 09.00am and 07.00pm weekdays only please).

BASUG is a founder member of the Association of Computer Clubs and its executive committee is elected annually by the membership.

## Bug-Byte Software Stand No: 668

Mulberry House,  
Canning Place,  
Liverpool L1 8JB  
Tel: 051-709 7071  
Telex: 628052 Sharet G  
Sales contact on stand:  
Val Owens

Once again, Bug-Byte is using the Computer Fair to show off its very latest titles. Last year, Manic Miner was our star attraction, which went on to be voted Arcade Game of the Year. This year we are launching another completely original concept, Star Trader, which will be available initially for the 48K Spectrum and the Commodore 64. Star Trader

combines both arcade and adventure in a challenging epic which is sure to become another Bug-Byte cult game. It is the first of a series of Megagames produced by Bug-Byte's in-house programming teams. The equivalent of over two years programming has gone into Star Trader — come and see it, come and buy it, you won't be disappointed.

Also on display and for sale are the recently launched Antics by Adrian Sherwin, and Ian Hoare's Computer Cookbook, as seen on TV, and extensively advertised in both computer and national press. Antics is a cartoon-style maze game for the 48K Spectrum, price £6.95. The Computer Cookbook is a complete menu planner, index and computerised cookbook which will transform life in the kitchen if you have a 48K Spectrum. It is supplied in a special two-cassette pack at £9.50.

Come to our stand to see these games and many more. Bug-Byte — the original software house.

## CJE Microcomputers Stand No: 410

78 Brighton Road, Worthing,  
West Sussex BN11 2EN  
Tel: (0903) 213900

CJE Microcomputers will be demonstrating the Star and Juki range of printers. The Juki 6100 daisy-wheel produces high quality output at an affordable price. The Star DP-8480 is a budget price printer with RS-232 interface as standard, making it the ideal choice for BBC, Epson HX-20 or Newbrain owners.

The Star Gemini 10X and Star Delta 10 offer a fantastic array of features at a down-to-earth price. Special exhibition-package prices will be available for BBC, Oric, Dragon, Atom, Epson HX20 and Newbrain Micros.

The CJE printer packs offer what you want. Along with the printer and the computer lead comes 100 sheets of paper and a mains plug with a proper rated fuse. The BBC Star Printer pack includes: the printer; data lead to the BBC; 100 sheets of paper; mains plug with 3 amp fuse; machine code screen dump software; text dump software; fact sheet explaining the sending of control codes in Command mode, Basic and Wordwise; program to set up function keys for use in Wordwise; function keys strip producing program for above; view printer driver.

## Computer Choice Stand Nos: 109, 127, 210, 226

Quadrant House,  
The Quadrant,  
Sutton, Surrey  
Tel: 01-661 8441  
Telex: 892084  
Sales contact on stand:  
John Payten

Computer Choice is the lively, entertaining monthly magazine which introduces you to computing without boring you to death with technical jargon and "how to program in machine code". Every month it provides a guide to low-cost computers and add-ons and publishes an unrivalled range of reviews of the latest games and software for the most popular home computers.

Computer Choice contains the reviews you can rely on, so why not take out a subscription and get a free cassette into the bargain? Just call in on our stand facing the main entrance.

## CP Software Stand No: V56

2 Glebe Road, Uxbridge,  
Middlesex UB8 2RD  
Tel: (0895) 31579  
Sales contact on stand:  
Chris Whittington

We are a UK-based company specialising in intelligent games software. We also have a range of languages and utilities as well as high-selling arcade games.

Most of our products are for the Sinclair Spectrum, but we also have material for the Commodore 64 and are currently working on 68000 software for the QL.

Several of our programs have been translated into foreign-language versions for the export market.

## C/WP Computers Stand Nos: 626, 628, 527, 529

Willow House, Willow Place,  
London SW1P 1JH  
Tel: 01-828 9000

C/WP Computers is offering amazing prices. Floppy discs for £12,

monitors for £89, Epson printers from £289, Silver Reed daisy-wheels from £289, Epson ribbons from £4, buffers from £49, serial and parallel interfaces from £49, all our prices including VAT.

Business systems — ask at the stand for details of IBM, Apple, Osborne and Cortex systems suitable for business use.

## Carnell Software Stand Nos: 763, 862

North Weylands Industrial Estate,  
Molesey Road, Hersham, Surrey  
Tel: (0932) 245812  
Sales contacts on stand:  
Simon Bassett, Stuart A Galloway

The latest addition to Carnell Software's Third Continent series of adventures, The Wrath of Magra, will be on sale here for the first time at any show. This very popular sequel to Volcanic Dungeon and Black Crystal has been enjoying a lot of publicity and public demand. There are three 48K Programs for the Spectrum and a 160-page paperback book detailing the History of The Third Continent, a glossary of monsters and spells, all of which you can use in the adventure.

Also see our range of original arcade games on display.

## CBS Electronics Stand Nos: 427, 429, 853, 855

Headley Road East,  
Woodley, Berkshire  
Tel: (0734) 698188  
Telex: 849787  
Sales contact on stand:  
Phillip Gibbs

1984 heralds the arrival of another technological breakthrough for CBS Electronics, Adam — the complete computer system. Adam is the complete computer system because it fulfils the needs of every personal computer user and makes personal computing fun, and useful, for every member of the family. Adam has several important features, which make Adam the obvious first choice in personal computer systems.

Adam is powerful, the 80K RAM memory-module is more than enough for most people's needs. Adam can load, or save, programs quickly using the digital data drive unit. This unique system is many times faster than conventional audio tape storage. Adam has an in-built

# The very best in arcade action-

is brought to you by Tansoft – the specialists of the Oric-1 and Atmos Computers.

The games that people are fighting for are:-

### Defence Force:

Pilot your space-craft through alien territory and fight off the enemy approaching from both sides. 48K. £7.95.

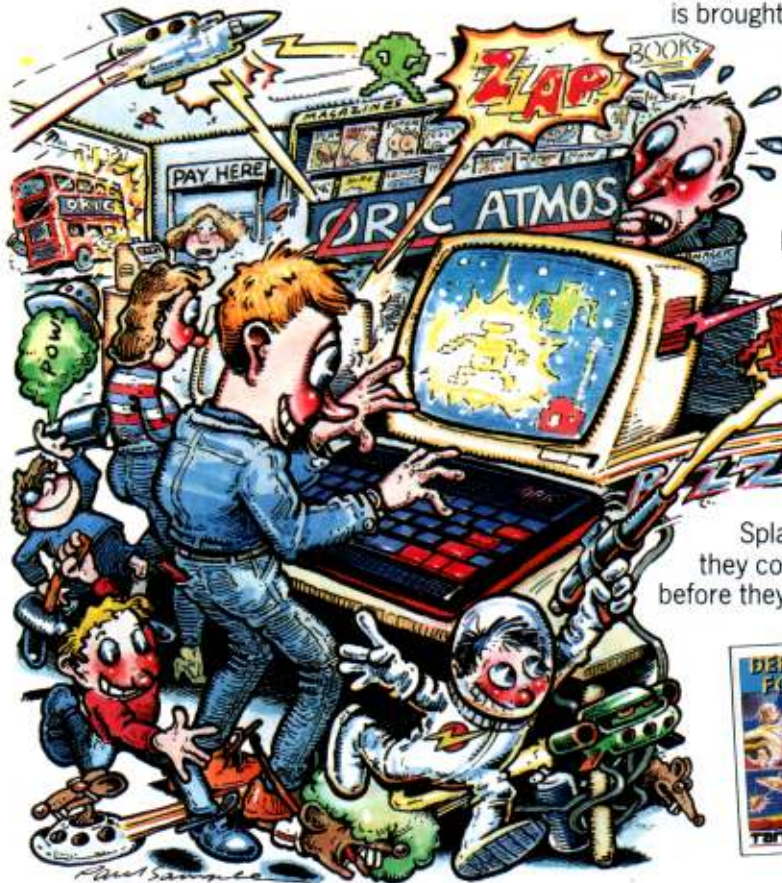
### Ultima Zone:

Shoot the Walkons, avoid the bouncing Brunos and battle your way through the satellite zone. 48K. £8.50.

### Rat Splat:

A revolting game.

Splat the rats in the sewer before they consume the cheese, and destroy the monsters before they consume you! 48K. £7.95.



# or let's get down to business!

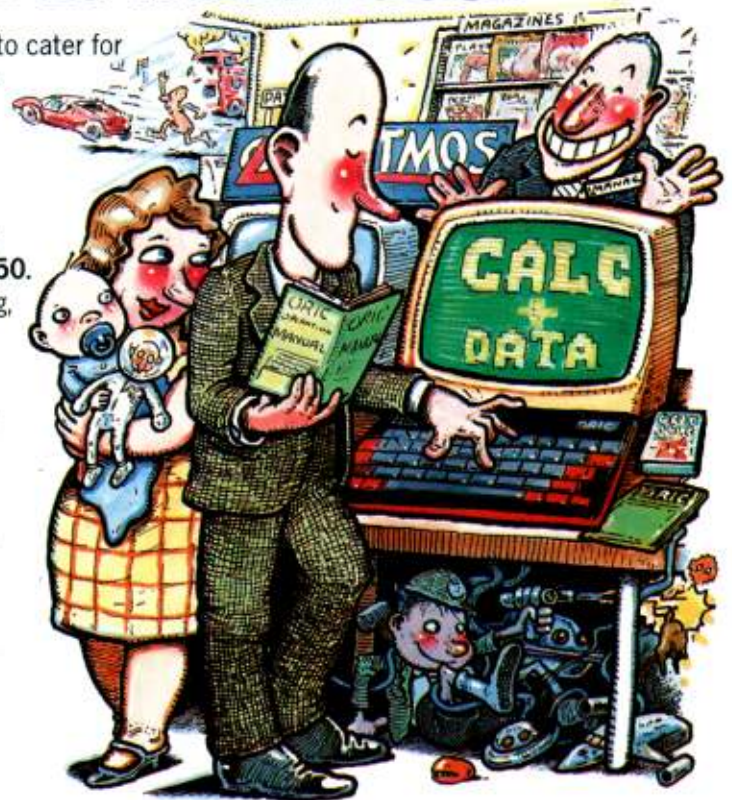
Tansoft produce a wealth of business and utility software to cater for every interest. The 'not so' games-minded people may be coming to grips with:-

**Author:** A powerful word-processor program which includes word-wrap and word-count. Ideal for letters and reports. 48K. £14.50.

**Oric Calc:** A full spread-sheet program allows you to sum columns or rows and apply complex formulae. 48K. £14.50.

**Oric Cad:** A computer aided design program for displaying, rotating, enlarging and shading objects on the screen. 48K. £9.99.

For the full range of Tansoft software – which currently numbers over 20 titles – pick up a catalogue in your local Computer Store or contact Tansoft at Unit 1, The Techno Park, 645 Newmarket Road, Cambridge. Tel. Teversham (02205) 2261.



# TANSOFT

# ANIROG

House Of  
Usher

ICE  
HUNTER

**3 NEW  
TURBO 64  
GAMES  
£6.95  
EACH**

## House of Usher

Dare you enter the House of Usher. Behind each locked door of this nine room mansion a different style of arcade action awaits you.

## Ice Hunter

Ice hunter needs special ice blocks to build an igloo unaffected by the arctic sun. He has found the source of the blocks in a multi level cavern, but can he outwit the grim inhabitants — the dragons — sea lions and vicious birds and float the blocks down the river to construct his dream home. Six levels and two player option.

**PETCH**

## Petch

The wonder penguin is engaged in a desperate search for diamonds hidden in a maze of ice cubes, harassed and chased by his arch enemies Snowball and Snowbox. His chances of survival are slim. Six levels of skill with two player option.

**Also available on Disk at £9.95**

TRADE ENQUIRIES: ANIROG SOFTWARE LTD. 29 WEST HILL DARTFORD KENT (0322) 92513/8  
MAIL ORDER: 8 HIGH STREET HORLEY SURREY 24 HOUR CREDIT CARD SALES HORLEY (02934) 6083  
PAYMENT BY CHEQUE P.O. ACCESS/VISA 50p POSTAGE & PACKAGING £2.00 OVERSEAS

word-processing program which is easy and rewarding to use. Even the novice can produce professional results every time.

Adam has a 75-key sculptured, professional keyboard. In addition to conventional keys there are six command keys and six smart keys which make programming and processing easy. Adam has a letter-quality printer which uses a professional daisywheel and prints at a rate of 120 words per minute which is twice the speed of a good typist.

## **Centresoft** **Stand Nos: 229,** **328**

**Unit 24 Tipton Trading Estate,  
Bloomfield Road, Tipton,  
West Midlands DY4 9AH  
Tel: 021-520 7591  
Sales contact on stand:  
Ann Brown**

Centresoft is the UK's longest established distributor of home computer software. With over 1600 software titles in stock, catering for the widest range of machines such as Atari, BBC, Commodore 64, Dragon, Lynx, Oric, Spectrum and Vic 20, they can supply, with one phone call, most of the needs of any retail outlet. They also carry a wide range of peripherals such as joysticks, interfaces, cassette units, printers, speech units, upgrade kits, keyboards and printer cables. Books and magazines are also supplied by Centresoft thereby completing the support Centresoft offers the retailer.

US Gold is a well-established software house dedicated to licensing the best of American software, and producing it at British prices. The success of the initial products such as Beachhead, Soloflight, and Zaxxon amongst others, indicate the high quality and standards that the end user can confidently expect from US Gold in the future. Over the next few months there will be more titles available and US Gold will ensure that for Commodore 64 and Atari the end user will have plenty of high quality products to look forward to.

## **CDS Micro** **Systems** **Stand Nos: 660,** **662**

**10 Westfield Close,  
Tickhill, Doncaster,  
South Yorkshire**

**Tel: (0302) 744129**  
**Sales contacts on stand:**  
**Jim Walsh, Grant Elner,**  
**Giles Hunter**

Also on show will be the highly acclaimed Colossus Chess 2.0 for the Commodore 64, one of the finest chess programs ever written, available on both disc and cassette. In our educational series on the 48K Spectrum a Spanish and Italian package with accompanying audio cassette will be released, following the recently very successful French/German and audio package.

Other titles on display will be the recent success on the Oric Atmos, Word Search, a family word game, Timebomb and Winged Warlords, as well as the Spectrum chartbuster, Pool.

## **Challenge** **Research** **Stand No: V58**

**218 High Street,  
Potters Bar,  
Hertfordshire EN6 5BJ  
Tel: Potters Bar 44063  
Sales contact on stand:  
A P Johnson**

Challenge Research is the electronics division of a family-owned manufacturing company with 30 years experience in mail order. Two special products are on display at the Computer Fair. First, a cassette recorder for home micros, each Challenge 836 recorder is factory checked and aligned for computer use. LED lights show when output levels are correct and a special circuit ensures high reliability. For ZX Spectrums we offer a Beep-amplifier option that is exceptional value for money. Challenge 836 recorders are £32.20 or with Beep-amp option £36.75.

Second is a revolutionary software storage device for the ZX Spectrum, the Challenge Sprint. It uses standard cassette software but loads and saves programs at four times normal speed; a 48k program normally taking 4.5 minutes to load can be running in 65 seconds. This remarkable device sets new standards for storage media and was designed and built in Britain. It incorporates the latest recording techniques, digital circuits and ROM software to offer not only very fast but remarkably reliable program loading and saving. The price is £59.95 and no interface is required. Stocks are available at our

stand or by mail or telephone: Access or Barclaycards welcome.

## **Commodore** **Business Machines** **Stand Nos: 217, 317**

**675 Ajax Avenue, Slough,  
Berkshire SL1 4BG  
Tel: Slough (0753) 74111  
Telex: 848403 CBMUKL G  
Sales contact on stand:  
Stewart Muirhead**

Commodore will be exhibiting their full range of computers and peripherals. The home computers being exhibited will include a preview of several new computers soon to be available in the UK. The new models have a very advanced BASIC with over 75 programming commands, 121 colours and excellent sound and graphics capabilities.

Completing the range of home computers will be the popular Commodore 64, voted Home Computer of the Year 1983. The 64 is supported by a range of software for all types of applications including education, business and entertainment.

A full range of peripherals including monitors, disk drives and a selection of printers to suit all pockets and printing needs will be on display.

A variety of new software products will be demonstrated on the stand. Several art and music-related packages will be shown for the first time, as well as a range of new adventure and arcade-style games. The educational contribution will include a number of products aimed at the pre-school child. You can also practice your business tycoon skills with a full-blown business simulation program on the Commodore 64.

And for the real businessman Commodore will be demonstrating the latest upgrade to the 8000 series, the 8296. Although a restyled and redesigned machine the 8296 is compatible with the enormous range of software readily available for the 8000 series.

## **Compusound** **Stand No: V3**

**32/33 Langley Close,  
Redditch, Worcs. B98 0ET.  
Tel: (0527) 21429 (21439 ansaphone)  
Sales contact on stand:  
Frank Woodcock**

Compusound are exhibiting the Telesound unit that enables the Spectrum 'Beep' to be heard and

controlled through the TV set so as to get sound and vision together. They will also be exhibiting an exciting new quiz game for one or two players called Block-Buster that tests knowledge and speed of recall. The two tape package will be on sale at a special price of £4.95 (£1 off). Block-Buster will be the game to play in 1984 and extra question tapes are planned. Who said learning can't be fun!

## Computer & Video Games Stand Nos: 869, 871

Durrant House, 8 Herbal Hill,  
London EC1R 5EJ  
Tel: 01-837 3699  
Sales contact on stand:  
M Rich

Win a holiday to the Olympics . . . play the brand new Olympic Pi-man game specially written by Automata . . . Get our free 48 page book of games . . .

All of this and more in the brand new July issue of "Computer & Video Games", available on the stand. Plus all of those priceless back-issues you missed . . . Plus the Bug Hunter answering your computer problems . . .

See you later on today.

## Computer Bookshops Stand Nos: 358, 360

30 Lincoln Road, Olton,  
Birmingham B27 6PA  
Tel: 021-707 7544  
Telex: 334361  
Sales contact on stand:  
Delia Tracey

Computer Bookshops wholesales books and software to the retail trade, and offers titles from approximately 40 major U.S. and U.K. publishers besides being sole U.K. distributors for Sybex and Compuserve publishing.

Best selling books relevant to all the popular home computers will be on display, together with titles covering general books on micro-computing and books of special interest to the businessman.

## CRL Stand No: 568

CRL House, 9 Kings Yard,  
Carpenters Road, London E15 2HD  
Tel: 01-533 2918  
Sales contact on stand:  
Tim Vernon

The Computer Fair will be the stage for the world premiere of The War of the Worlds. Based on the science fiction classic by H G Wells, The War of the Worlds is an arcade Adventure strategy in which the journalist, the hero of the Adventure, struggles to survive as he journeys across the home counties. Just finding food to stay alive is enough of a problem, let alone evading Martian fighting machines.

Also on show will be all of CRL's other new releases including Glug Glug and Whirlybird for the CBM 64, and Implosion for the 48K Spectrum, plus its April releases for the BBC, Spectrum and Commodore 64.

## Crystal Computing Stand No: 663

125 Smedley Road, Cheetham Hill,  
Manchester M8 7RS  
Tel: 061-205 6603  
Sales contact on stand:  
David Llewelyn

Crystal Computing are attending the fair to show their three new releases "Tube Way Army" — "It's the Wooluf" and the Zeus 64 assembler.

Crystal are well known for the high quality of their products and "Tube Way Army" is a good example, being probably the best game currently available for the Dragon 32/64 and Tandy, Colour 32K.

"It's the Wooluf" is an addition to their range of games for the Spectrum and will suit both the 16K and 48K versions.

The Zeus 64 assembler for the Commodore 64 looks very interesting indeed and promises to become as indispensable to serious Commodore users as it's predecessor has become to Spectrum owners. Any interested Commodore owners should go to the stand and see a demonstration of its capabilities.

Also a pre-production version of a game by Simon Brattel called Dark Star will be show at the stand.

## DK Tronics Ltd Stand Nos: 674/676 Unit 6,

Shire Hill Industrial Estate,  
Saffron Walden,  
Essex CB11 3AQ  
Tel: (0799) 26350  
Telex: 817812 DK TRON G  
Sales contact on stand:  
Frank Hamilton

DK Tronics will be featuring the following family of Spectrum peripherals together with current software releases:

Microdrive compatible keyboard featuring space bar and stepped keys. This updated version of our very successful 52-key keyboard allows Interface I and the computer to be fitted inside the case. Alternatively it may be used without Interface I which can be added later. Microdrives are accessed via a 16-way cable which leads out of the keyboard case. All connections including RS232, ear, mic, power, TV etc are available via ports at the rear of the case.

Light pen. Upgraded version of our highly successful forerunner with faster operating software supporting 16 predefined instructions. Works to pixel level with pixel accuracy.

Dual port joystick interface. Highly versatile offering 2 joystick ports. Runs software using 6, 7, 8, 9 and 0, re-definable key functions and 31 mode i.e. Kempston.

Programmable Joystick Interface. Can be programmed via software or direct from keyboard. Works with any program whether joystick defined or not.

Parallel Centronics Interface. Accommodates all parallel Centronics type printers. Microdrive compatible — controlling software fully relocatable. Supplied with full instructions and controlling software.

R.O.M. Cartridge Interface. Designed with economy in mind for the thousands of existing joystick and interface owners who wish to run ROM Cartridge software without the cost of acquiring Interface 2.

## Data Technologies Stand No: 405

Century House,  
Market Street,  
Swavesey,  
Cambridge CB4 5QG  
Tel: (0954) 30817  
Telex: 817365 Bay Art G  
Sales contact on stand:  
Martin Vlieland-Boddy

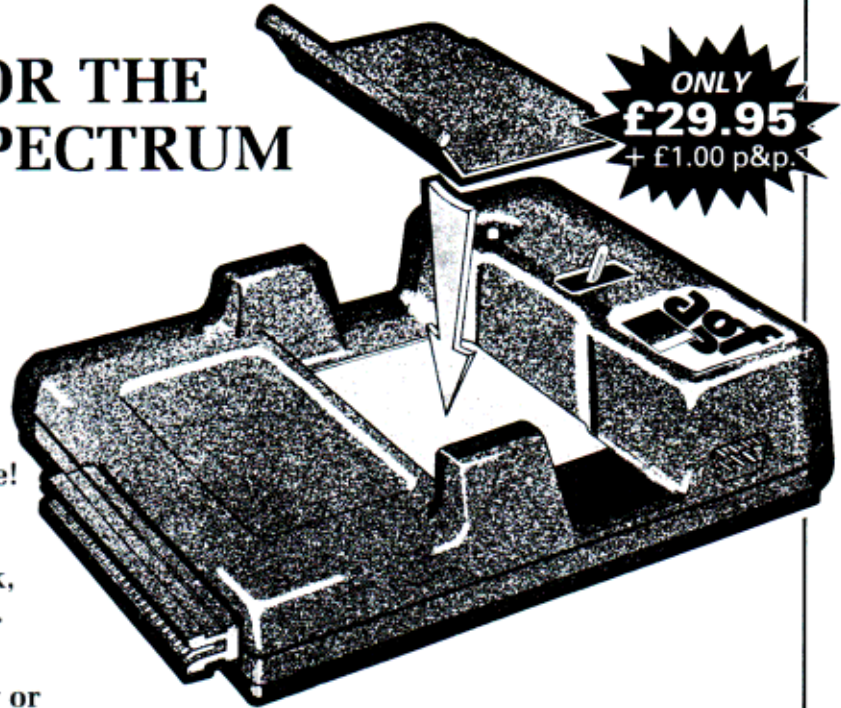
The Graduate, the first IBM compatible upgrade for the BBC

# agf

## PROTOCOL 4 PROGRAM CONTROL CUSTOMISING INTERFACE

### FOR THE ZX SPECTRUM

ONLY  
**£29.95**  
+ £1.00 p&p



### FEATURES

- \* Compatible with ALL Spectrum software.
- \* Hardware programmed by unique 'Custom Card' - simply snap into place!
- \* Direct addressing ensures optimum response time.
- \* Pre-programmed cards for AGF/Protek, Kempston and ZX Interface 2 protocol.

- \* Uses no memory or back up software.
- \* Quickshot II rapid fire and Trackball compatible.

### QUICKSHOT II JOYSTICK

ONLY  
**£11.95**  
+ £1.00 p&p

- \* Side entry joystick port eliminates flying leads.
- \* Low power four i.c. design.
- \* Recessed Computer Reset button for clearing machine code programs.
- \* Rear expansion port.
- \* Up to five individually programmed Protocol 4's per Spectrum for multiple control applications.

### FULL CONTROL CUSTOMISING - AS EASY AS SNAP!

Send to: AGF HARDWARE, DEPT. L, FREEPOST, BOGNOR REGIS, WEST SUSSEX PO22 9BR

QTY	ITEM	ITEM PRICE £	TOTAL £
	AGF PROTOCOL 4	30.95	
	EXTRA PACK(S) OF 5 CUSTOM CARDS	3.95	
	QUICKSHOT II JOYSTICK	12.95	
	<b>FINAL TOTAL</b>		

Please tick appropriate box:-

- I enclose a cheque/Postal Order payable to AGF HARDWARE for £ .....
- Please charge my Access/Barclaycard Account No. ....

Signature \_\_\_\_\_

From: MR/MRS/MISS \_\_\_\_\_

ADDRESS \_\_\_\_\_

- Please send me more information about AGF PROTOCOL 4.

on stand



Gold plate contact keys are used,  
guaranteed life of 10<sup>6</sup> operations



Tough ABS case,  
225mm x 350mm x 65mm deep

It's easy to see why the FDS Keyboard is the best selling Spectrum keyboard in the world. This stylish, slim-line keyboard has been transforming Spectrums world-wide.

The keyboard contains all the graphic characters of your ZX Spectrum, plus additional function keys. It has 4 cursor control keys, an auto rub-out key, a separate key for full stop and comma, a full length space bar, shift keys either side and 2 function keys for direct entry into green and red E modes.

The FDS Keyboard has real individual contact switches and not a membrane like most other Spectrum keyboards on the market which are more expensive.

The case is easily adapted to allow the microdrive to fit inside along with the power supply.

Fixing is simplicity itself and no soldering or technical knowledge is required.

**£49.95**  
+ £2.50 p&p

Keyboard buffer available allows Spectrum to be connected without dismantling **£8.75 + 80p p&p**

# Transform your Spectrum now!



The Fuller Box can be bought separately for £29.95 and the Orator for £34.95 + 80p p&p

This is the ultimate games unit, containing not only the sound synthesiser from the Fuller Box but also the speech unit from the Fuller Orator.

It will probably be the only add-on you will need to buy after the Spectrum. We don't call this the Master Unit for nothing as it contains a Programmable Sound Generator, Joystick Controller, Beep Amplifier, Cassette Interface, Through Bus and 'Orator' Phonom Voice Synthesiser plus a three-inch loud speaker and volume control.

Speech can be synthesised easily so that your micro can talk to you and play chords of music at the same time. Directly accessible in Basic it is able to say anything you command using the keyboard or a games program.

**£49.95**  
+ £2.50 p&p

The Fuller Orator is now available for the BBC Micro and Commodore 64.

The FD42 keyboard is still a firm favourite when it comes to a low cost option for your ZX81 or Spectrum. It is now a "standard" to Sinclair users. Neatly presented in an attractive ABS plastic case it transforms the Sinclair computer into a useful professional unit, providing all the graphic characters of the ZX81 or Spectrum, with additional keys to aid the user. No technical knowledge is required for installation.

**£29.95** + 80p p&p

**SOUNDAMP** - The SoundAmp, amplifies all the sound your Spectrum makes, it has a volume control and is easily fitted and comes in a sleek black box like the Master Unit to match your Spectrum.

**£9.95**  
80p p&p

**RS232 PRINTERFACE** - ROM based software.

Versatile printer interface. Comes complete with instructions and lead.

**£34.95** 80p p&p

**CENTRONICS PRINTERFACE** - As above but for parallel printer with CENTRONICS input. Lead can be supplied at £7.95. Further details upon request.

**£39.95**  
80p p&p

**SOUNDSTICK** - Sound amplifier and Kempston compatible joystick interface

**£19.95** 80p p&p



See us at  
**YOUR COMPUTER FAIR**  
June 14-17 on  
Stand 669

**Fuller** MICRO SYSTEMS

Send large stamped addressed envelope for the free complete Fuller hardware range catalogue

Kits available on most items - Prices on request

Fuller Micro Systems  
The ZX Centre, 71 Dale Street,  
Liverpool 2. Tel: 051-709 4666.

709 4666 - Mail Order  
709 9280 - Tele Sales  
709 9209 - Customer Services  
236 4612 - Retail Sales

Please supply me with

I enclose a cheque payable to Fuller Micro Systems for £ or debit my credit card  Barclaycard  Access

Card No

Name

Address

Fuller Micro Systems, The ZX Centre  
71 Dale Street, Liverpool 2. Tel: 051-236 6109



Fuller reserve the right to alter specifications of the equipment without prior notice



model B. For an amazing mail order price of £599 (ex. VAT), the Graduate will upgrade the BBC Model B to a powerful 16-bit business computer.

Fully disc and hardware compatible with the IBM PC, the Graduate's MST<sup>TM</sup>-DOS operating system allows exploration of the massive range of IBM compatible business software, programming aids, compilers and languages universally available from all major software houses.

With a simple command stroke, the system can revert to Acorn's own operating system, thereby allowing programs in BBC Basic to be stored on disc, using the Graduate's own disc controller.

The compact and tidy Graduate models simply plug in to the 1MHz bus on the Model B. Within minutes you can be up and running with a fully IBM compatible system that really means business.

## Digital Integration Stand No: V55

Watchmoor Trade Centre,  
Watchmoor Road, Camberley,  
Surrey GU15 3AJ  
Tel: (0276) 684959  
Sales contact on stand:  
Dave Marshall

Spectacular software for the Spectrum and Commodore 64:

Fighter Pilot — a spectacular flight simulation of the world's most exciting jet fighter with stunning 3-D cockpit view and the most realistic 3-D air-to-air combat ever seen on the Spectrum. The supreme simulation, it leaves the rest at the runway threshold.

Night Gunner — the amazing air battle scenario where only aces survive. Enemy fighters attack from all directions — guns ablazing, 3-D ground attack sorties, and there's still the flight home. Game of the Month — Crash Micro, plus new releases.

Trade and export enquiries welcome.

## Disking International Stand Nos: 526, 528

Liphook,  
Hampshire GU30 7EJ  
Tel: (0428) 722563  
Telex: 858623 Telbur G  
Sales contact on stand:  
Roger Smith

Unbelievable — but true — Disking ship all floppy disc orders within four working hours. We believe we are the slickest in the UK, and it would appear that you do too. So come to the stands for one of the world's best floppy discs at special show prices — and claim your free exhibition goodies. If you are already a Disking customer come and join us for a glass of wine and collect your free exhibition goodies. If you use diskettes but have never experienced Disking's super service, come and see what you have missed and ask for a general price list with order form.

If we don't see you here at the show, please make a note of our telephone number (0428) 722563, where you can obtain the four-hour diskette.

## Double Mode Stand No: 888

16 Macadam Place,  
South Newmoor Industrial Estate,  
Irvine, Ayrshire,  
Scotland KA11 4HP  
Tel: (0294) 216339  
Sales contact on stand:  
Mr P. Campion

More monitor for the money. Doublemode has solved the problem of expensive colour monitors for use with computers such as the BBC and Electron. Further evidence of our ongoing progress is the recent launching of an 18in compact colour monitor for the Sinclair at £85 (plus VAT). We also launched an 18in with RGB with a green switch for word processing, plus composite video and a stand to fit your computer under the monitor, £129 (plus VAT).

The full range of colour monitors is 18in, 20in, 22in and 26in, which sell at the same basic price of £85 (plus VAT). The benefits to the user mean freedom from the constraints of using the home television as a monitor, business can also benefit by reducing the outlay on computer hardware. For educational use the monitors are ideal, big colour monitors increase the enjoyment and learning potential of pupils undertaking computer studies, they are also of particular benefit in group activities, in addition we offer very generous discounts to education authorities.

What else do Doublemode offer?

- Three months guarantee on all monitors;
- Optional extra on a re-gunned tube with a two year guarantee;

- A five year guarantee on the isolating transformer;
- As stated earlier an adjustable stand to fit under your monitor to house the computer/cables thus saving valuable space.

## Electronequip Stand No: 646

36-38 West Street, Fareham,  
Hampshire PO16 0JW  
Tel: Fareham (0329) 230670  
Telex: 91300105

Electronequip, a south-coast distributor of Acorn and Torch products from the early days, has introduced several of its own products on to the market:

Micro disc drive: 3in 80K micro disc drive, faster than many 5.25in disc drives, yet only costs £113 + VAT. Drive and interface costs £173 + VAT.

TV/Monitor is a television that has been designed so that it can be used as a monitor as well as a TV, cost £213 + VAT. A remote version is also available for £234 + VAT.

Its spacious premises at 59 West Street, Fareham, includes 20 station Econet and Torchnet systems which are on demonstration six days a week from 9am to 5.30pm as well as extensive stocks of BBC software and peripherals, Electronequip prides itself on its after-sales service and technical support. It provides courses on subjects such as Econet.

Electronequip supplies hobbyists, small businesses, industry, educational establishments, government establishments and dealers. It is a distributor of printers, monitors and disc drives. Its fully computerised order-processing system enables it to offer a same day despatch mail order service on its full product range.

All mail order, telephone order and credit card orders should be addressed to the above address.

Dealer enquiries welcome on all products.

## Encyclopaedia Britannica Stand No: 884

7th Floor, Lennig House,  
2 Masons Avenue,  
Croydon, Surrey  
Tel: 01-680 9229  
Sales contact on stand:  
David Ritchie

Encyclopaedia Britannica was first published in 1768. The latest 30-volume edition was compiled at a cost of £15 million over 15 painstaking years. It includes the writings of more than 4,000 experts, over 24,000 illustrations and 43 million words. The world's standard work of reference — now more useful than ever.

## Flexiwords Computershop Stand No: 736

18 Otley Road,  
Leeds LS6 2AD  
Tel: (0532) 758474

Come to Flexiwords Computershop for the Sinclair Spectrum, Commodore 64, BBC and Acorn Electron. Plus:

Software — business, education, utilities, arcade action, adventure. Peripherals — printers, disc drives, cassette recorders, joysticks, light-pens.

Books and magazines for the beginner and the expert.

Accessories — leads, dust covers, tape cleaners, discs, tapes.

If it's too much of a rush at the exhibition, visit our shop in Headingley, Leeds 6. You're welcome to come in and browse — and remember, you're better off at a proper computershop.

## 4 Systems Stand No: 615

68 Foxwood Close,  
Feltham,  
Middlesex TW13 7DL  
Tel: 01-844 1399

The 4QL System consists of peripherals and a storage device specifically designed to match the Sinclair QL Computer.

4QL Terminal — Either as a desk top peripheral base for the 4QL monitor and printer, or a carrying case for the QL. It houses and protects the computer. In an integrated compartment, 24 cartridges are neatly stored and accessed. Another compartment is reserved for cables and accessories.

4QL Monitors — Two models, RGB and monochrome, both are QL high resolution compatible and in matching black cabinets.

4QL Printer — The new Brother HR5, model 4QL in black and RS232 is exclusive to 4 Systems, sole UK distributor. The new Brother printer

is the ideal match for the QL.

4QL Cartridge Tidy — To solve microdrive cartridge storage and filing system. Special design allows additional units to interlock and each holds 16 cartridges.

The 4QL System is geared for the professional and business user of the QL.

## GCC (Cambridge) Stand No: 446

Tempus Court,  
Willingham, Cambridge  
Tel: (0223) 835330  
Telex: 817672

Sales contact on stand:  
Barry Billingham

GCC's entry into the peripheral and add-on market in 1982 was in response to a need to expand the micro computer, so that it could be used more usefully and effectively both domestically and for business.

GCC's commissioned and in-house designs for add-ons have proved highly successful. Its Beebase, Starbase and Romex 13, all designed to fit the BBC, have been enthusiastically received by dealers and the public. Another exciting GCC product is the Sage accounts package, the first serious accounts system for the BBC.

Company policy is to offer customers a helpful service. To very many people, the computer is still a complex tool and GCC feel it is an important element in its selling to ease the communication gap between product and customer.

Call in on the stand and meet us.

## GEC Dragon Stand Nos: 417, 419, 421, 516, 518, 520

c/o Welbeck Pr.,  
2 Endell Street,  
Covent Garden,  
London WC2H 9EW  
Tel: 01-836 6677

Sales contacts on stand:  
Ken Edwards and Roland King.

Dragon has for the past two years produced one of the most successful personal computers, the Dragon 32. This has been joined by the bigger 64, disc drives and an impressive range of software.

In line with the increasing demand

for efficient and inexpensive small business systems, Dragon has now introduced the Dragon business system using the 64 and OS9-based applications software. The OS-9 family of advanced software is not only more powerful than most other micro-computer software, it is also much easier to understand and use.

Dragon Computers will be more readily available in the High Street because of its affiliation with GEC in the UK. This means the GEC Dragon will now be found alongside televisions, video disc players and radios throughout the country.

## Golem Stand No: 661

77 Qualitas, Bracknell,  
Berkshire RG12 4QG  
Tel: (0344) 50720

Sales contact on stand:  
Eva Koskuba

Golem is a small company specialising in developing software for the BBC Micro and Electron. Its range covers educational software, adventure game and utilities.

All the software has been produced with care, and attention given to detail, especially important when preparing educational programs, which are successfully used in thousands of schools and homes throughout the country. Cassette titles include: Educational 1, Educational 2, Fun with Words, Fun with Numbers, Jigsaw and Sliding Puzzles, Kon-Tiki, Games of Logic, Katakombs, Superlife and Utilities.

## Granada Computer Books Stand No: 753

8 Grafton Street,  
London W1X 3LA  
Tel: 01-493 7070  
Telex: 25611

Sales contacts on stand:  
Andrew Connel, Tony Palmer

Granada leads the field in personal computer books. From the Atari to the ZX Spectrum, Granada has the best, the clearest, the most practical books to help computer users get more profit, benefit and fun from their machines. The full range of Granada Computer books will be on show at the Computer Fair, where we welcome visitors to our stand. Collins Microsoftware will also be displayed.

## Interceptor Micros Stand Nos: 235, 237, 334, 336

Lindon House, The Green,  
Tadley, Basingstoke, Hants.

Tel: (07356) 71145

Telex: 849101 Inmics

Sales contact on stand:

Mr. J. M. Jones

Interceptor Software, the UK's number one producer of Commodore Software, will be as usual releasing new products at the show which include:

Tales of The Arabian Knights

CBM

Where's My Bones?

CBM

Trollie Wallie

CBM

Message from Andromeda

Spectrum

All these games are with musical accompaniment and superb graphics to supplement the highly rated 'China Miner', 'Aquanaut', and 'Heroes of Karn' to name but a few of our blockbusters. It should be noted that all our games are now available on diskette at £9.00 each.

Special Show Offer: £3 off all games purchased at the show plus special voucher for future purchases at discount prices.

## Interface Publications Stand Nos: 673, 772

9-11 Kensington High Street,  
London W8 5NP

Telex: 935882 Interf G

Sales contacts on stand:

Liz North, Tim Harnell

ZX Spectrum, Sinclair QL, ZX-81, Commodore 64, Vic-20, Dragon 32, Atari, BBC Micro, Apple, Electron, TRS-80, TI99/4A and Oric. If you own, or have access to any of these microcomputers, there is an Interface book for you. Our list includes many interesting titles which are not machine specific, like "The Easy Way to Program Your New Computer" by Tim Hartnell, "The Beginner's Guide to Forth" by David Johns, "Learn Pascal on Your BASIC Micro" by Jeremy Ruston and "Using Computers in Education" by Clive Gifford.

As well as our range of best selling titles which you may have seen before, we have published several new books, both machine specific and general titles, for the Computer

Fair. These include "Exploring Artificial Intelligence on Your Microcomputer" by Tim Hartnell, "Exploring the Sinclair QL" by Andrew Nelson, "49 Explosive Games for the ZX Spectrum" by Tim Hartnell, "The Art of Structured Programming" by Peter Juliff, "Dynamic Games for Your Electron" by Neal Cavalier-Smith, "Mastering Machine Code on Your Commodore 64" by Mark Greenshields, "Practical Uses for the Microcomputer in the Home" by David Hole, "3D Animated Apple" by Phil Cohen, and many, many more.

Come and see us on our stands, and don't forget to look out for the special show prices on most of our books.

## Ivysoft Stand No: V1

91 Cleeve Drive, Ivybridge,  
Devon PL21 9DS

Tel: (07554) 4088

Sales contact on stand:

Mike Rhodes

Originally a mail-order firm specialising in the sale of software for the Spectrum, Ivysoft opened The Software Shop in Plymouth in August of last year. It has probably one of the largest ranges of home-computer software in the south west, with some 2,000 different titles for all the popular home micros. Mail order is welcomed and new customers can obtain a free 20-page price list by writing or telephoning. Export orders welcomed for which there is no extra charge.

We also run Drake Distribution, a wholesale service for retailers both in this country and abroad, and offer competitive terms and one of the widest range of titles. At the moment there are over 1,000 titles including all the latest releases.

We can also supply retailers with a wide range of printers, computers, monitors, disc drives, paper, etc. All at competitive rates. For our wholesale price list contact Mike Rhodes on our stand or telephone (0752) 672235 after the show. For prospective software stockists we can provide a starter pack for which, again, we shall be happy to provide details. For the duration of the show we will be offering software at discount prices.

## John Wiley and Sons Stand No: 401

Baffins Lane,  
Chichester, West Sussex

Tel: (0243) 784531

Telex: 86290

Sales contact on stand:

Geoff Farrell

Spectrum, ZX-81, BBC, Electron, Commodore 64, Vic-20, Newbrain, Oric, Atmos, Apple, IBM PC, Pet, Dragon, Atari, Sharp, Sinclair QL, PDP-II, RML-480Z, TRS-80, Amstrad, Spectravideo, Sirius, Z-80, 6502 8080/5, 6809 — Wiley has books or software on all these.

And languages too — Ada, Algol, APL, Basic, C, Cobol, Comal, Fortran, Forth, Lisp, Pascal, Pilot, Prolog. Don't forget adventure games, arcade games, educational and utility software from Mosaic Bookware, Horwood, Sigma, NCC, Wiley, Bourne, ASK, Ebury, and the full range from Acornsoft.

Just some of our new software, book and bookware titles for this year's Computer Fair — "The Stainless Steel Rat", by Harry Harrison, "Erik the Viking", by Monty Python's Terry Jones, "Jet Set Roulette", from Horwood Software, "Sinclair QL User Guide" and "Acorn Electron Puzzle Book" from Sigma, "Word Processing on the BBC Micro" and Alty and Coomb's "Expert Systems" from the National Computing Centre, "Mastering the Commodore 64" and "Winning Games on the ZX Spectrum" from Horwood, "Adventure into BBC Basic", from Wiley.

Stand 401. Wiley — you'll find more than 300 book titles and 150 software titles. We look forward to seeing you.

## Kansas City Systems Stand No: 870

Unit 3,

Sutton Springs Wood,  
Chesterfield S44 5XF

Tel: 0246 850357

Having exhibited at the very first Computer Fair, it is only too expected that Kansas would be present again.

In addition to BBC and Electron programs, those for the Colour Genie and the old Tandy TRS-80 will also be on offer.

As well as arcade games, Kansas software includes the whole spectrum including a full feature Word Processor, Data File, Personal Accounts and many utilities.

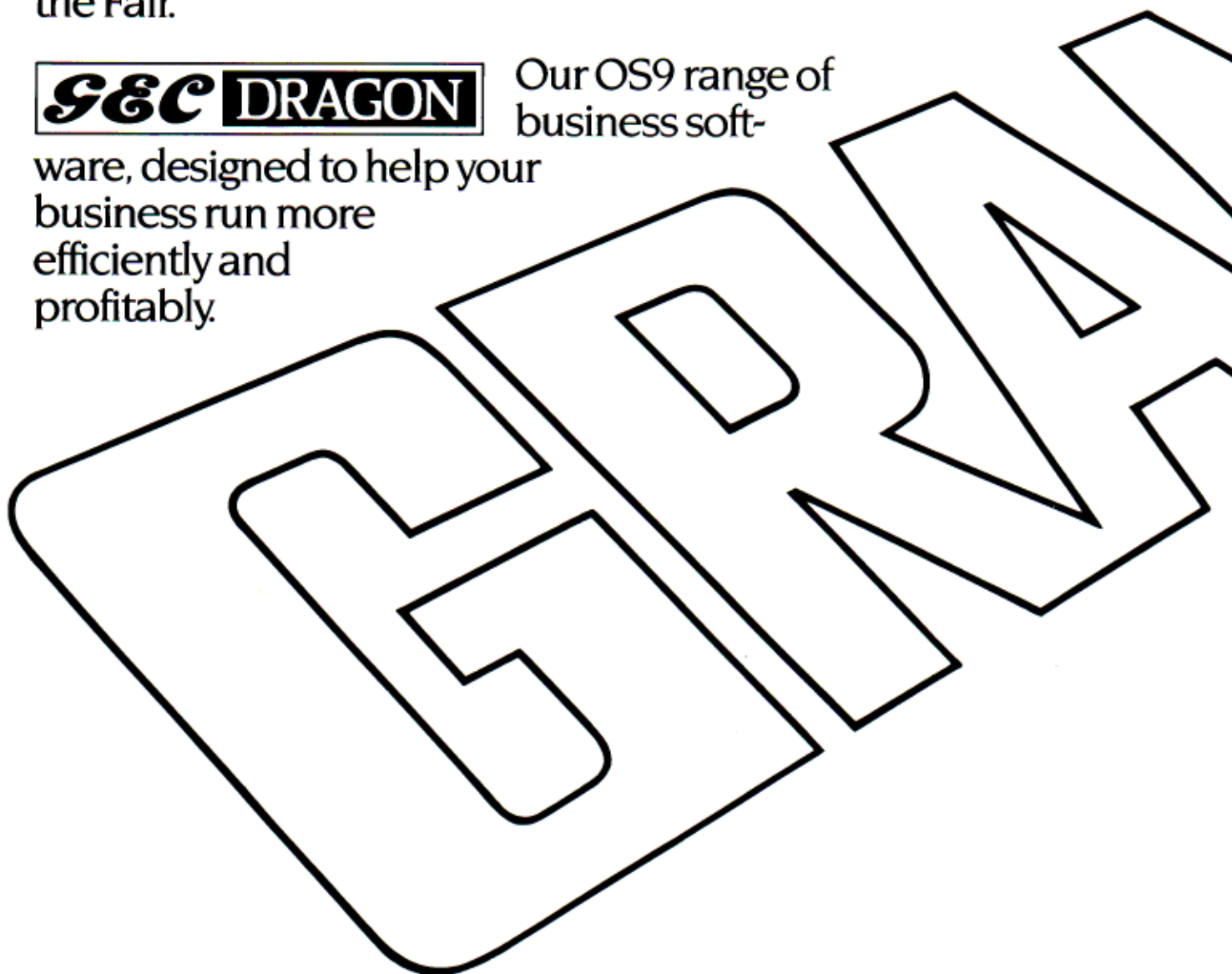
Remember, Kansas is famed for its postal service, offering a same day return first class post service on all programs, as well as an unconditional lifetime guarantee.

There's one stand at Earls Court that's really got something for everyone. From the beginner to the professional you'll find the GEC Dragon stand (near West Brompton entrance) packed with goodies. Come and see us, you'll be assured of a warm welcome.

**GEC DRAGON** The ever popular Dragon 32 and the recently announced GEC Dragon 64. Two superb computers ideal for home and small business use.

**GEC DRAGON** Our vast range of games is here for you to try and buy. Make sure you see the brand new games we're introducing here at the Fair.

**GEC DRAGON** Our OS9 range of business software, designed to help your business run more efficiently and profitably.

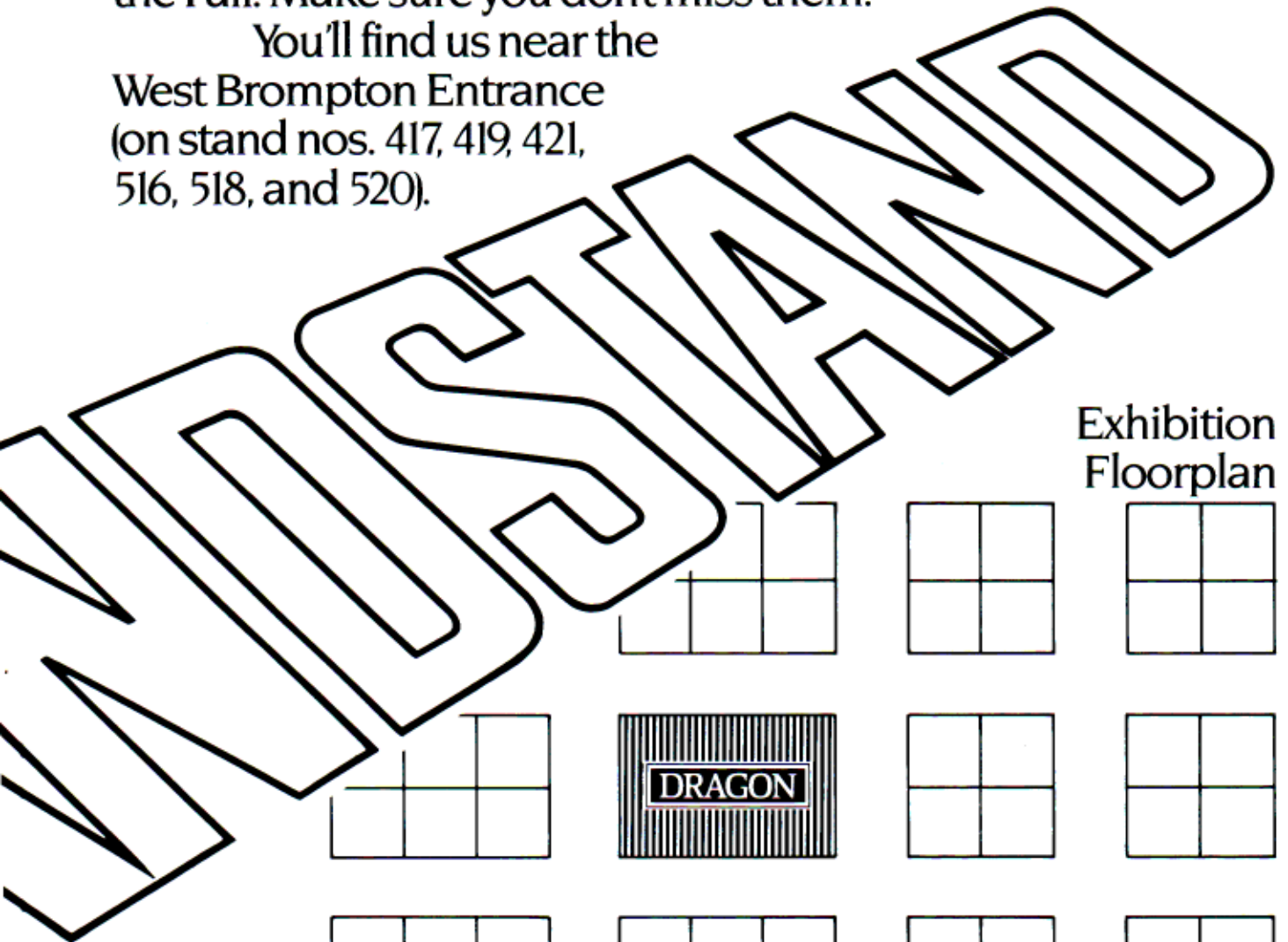


**S&C DRAGON**

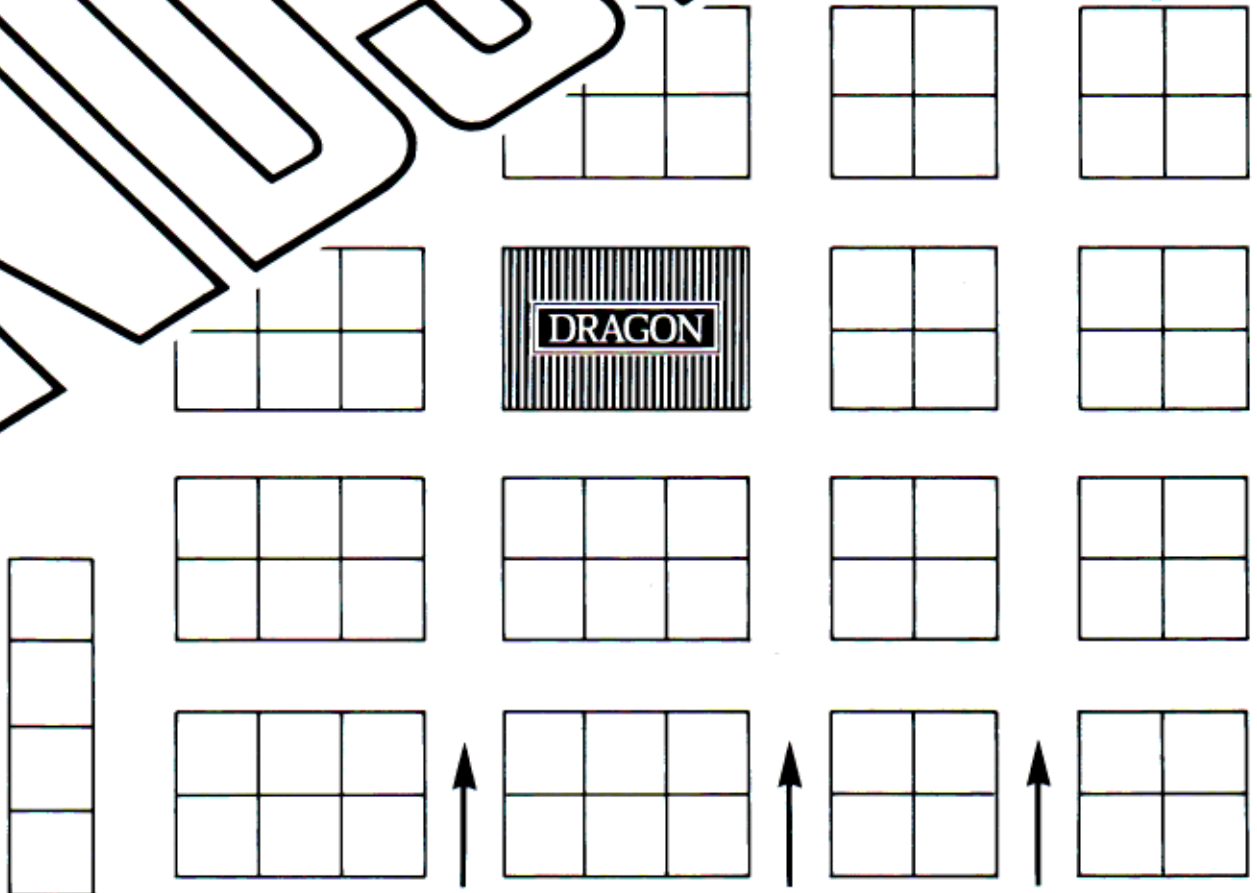
We're taking the wraps off several brand new products

which are getting their first public showing here at the Fair. Make sure you don't miss them.

You'll find us near the West Brompton Entrance (on stand nos. 417, 419, 421, 516, 518, and 520).



Exhibition Floorplan



WEST BROMPTON ENTRANCE

**S&C DRAGON COMPUTERS**

## Kelwood Computer Cases Stand No: V4

Downs Row,  
Moorgate,  
Rotherham S60 2HD  
Tel: 0709 63242  
Sales contact on stand:  
Michael Belk

The Kelwood K-Board is a brand-new way of dealing with the problem of the Spectrum Keyboard. Until now, alternative keyboards have relied on a complete new housing for the Spectrum printed circuit board, amongst other reasons because of the size of the switches used.

Kelwood have now found a more compact switch which has enabled them to mount the whole keyboard assembly on top of and in place of the Spectrum's rubber key mat. It must also be said that it does not use the Spectrum's membrane circuit and thereby eliminates the associated problems.

Fitting is simplicity itself. The new keyboard simply fits where the old one was and the ribbon connectors (which are terminated on a small piece of printed circuit board) replace the existing ribbons.

The keys which are black are hot-foil printed (a form of plastic colour welding) in gold and red. They have a fast switching time, smooth action, give positive tactile feedback and have a travel of less than 1mm. The keys are shrouded by a plastic moulding on top of which sits the original Spectrum key template. The K-Board sells at £28.50 making it the least expensive Spectrum keyboard available.

Kelwood are also displaying their range of amplifiers and hardware for the Spectrum.

## Kerian (U.K.) Stand No: 406

29 Gisburn Road, Hessle,  
North Humberside HU13 9HZ  
Tel: (0482) 643786  
Telex: 527619 Kerian  
Sales contact on stand:  
Ken Simmonds, Derek Wilson

A recently new name in the industry, Kerian, has introduced many new titles for the most popular micro-computers. Kerian concentrate in two main fields, quality games and stimulating educational software for the home user, and as such are lucky

to be able to call on personnel who have many years of experience in their respective fields.

All our products are developed in line with our market research department, to ensure that the customer has what he requires and that retailers are not left with shelves of un-saleable products. We also have a contracts division which can supply competitively priced experience to the rest of industry, in whatever field required. The manager of the contracts division, D V Wilson, will be pleased to assist in any way.

Competitive dealer prices make Kerian software an attractive proposition for all retailers and our sales manager, K Simmonds, will be available at Earls court to answer any queries.

## Llamasoft Stand No: 563

49 Mount Pleasant,  
Tadley, Hants RG26 6BN  
Tel: (07356) 4478  
Sales contact on stand:  
Hazel Minter

We shall be exhibiting our usual range of quality software for the Vic-20 and Commodore 64, and also our latest game for the CBM 64, Sheep in Space, in which the player controls an interstellar space sheep. If you are not already familiar with our unique style of games design, come along to the stand and meet Mutant Camels, Space Sheep and the Metagalactic Llamas . . .

## Longman Software Stand Nos: 619, 621

Longman House, Burnt Mill,  
Harlow, Essex CM20 2JE  
Tel: (0279) 26721 Ext 370  
Telex: 81259  
Sales contact on stand:  
Jane Bugge

Longman Software includes friendly games for learning basic reading and writing skills for the 16/48K Spectrum and the BBC Micro B. Each game is guaranteed to combine fun with practical skills and comes complete with instructions and notes on how to get the most out of your home computer. Also in our range of Early Learning Software are some new, exciting games for the 48K Spectrum, Commodore 64 and BBC B.

See our invaluable revision software for "O" Level and CSE exams for the 48K Spectrum, Commodore 64 and BBC B.

## M C Lothlorien Stand Nos: 769, 771

56a Park Lane, Poynton,  
Cheshire SK12 1RE  
Tel: (87) 6642  
Sales contact on stand:  
S E R Lees

Earls Court 1984 marks the launch of Lothlorien software for the Commodore 64, together with other new products for Spectrum, Atmos, Dragon and ZX-81 home computers.

The products are designed to strengthen the Warmaster, Active-master and Adventuremaster ranges of computer games and demonstration facilities will be provided on the stand to allow you to see and sample the games.

Trade customers from both the U.K. and overseas will be welcomed by the Sales Manager, Don Unger, who will be available to discuss future marketing arrangements for both existing and projected Lothlorien games. Samples of catalogues, display material and newsletters will be available from the stand and arrangements have been made to enable trade orders to be despatched during the course of the show.

Finally, watch out for the micromice!

## Melbourne House Stand Nos: 343/345

Castle Yard House,  
Castle Yard,  
Richmond TW10 6TF  
Tel: 01-940 6064  
Telex: 935425 MEL RSO  
Sales contact on stand:  
Christine Laugharne

Melbourne House will be exhibiting their quality range of computer books and software for all the popular home computers including the Spectrum, Commodore 64, BBC, Oric and Dragon computers.

New software on show will include Mugsy, the first interactive comic cartoon game, and Horace Goes Skiing, a sequel to the highly successful Hungry Horace, which is now available for the Spectrum, Commodore 64, and Dragon computers. Also new is Star Trooper, a fast, action-packed space game for the Commodore 64, and Classic Adventure, an updated version of the first ever text adventure, which is now available for the Spectrum and Commodore 64 computers.

New books on show will include *Advanced Spectrum Forth*, an essential aid to anyone who wishes to discover Forth's true potential on their Spectrum, and *Advanced Spectrum Machine Language*, a collection of exciting machine language routines which can be incorporated into the player's own programs.

And of course, visitors to the stand will be able to see Melbourne House's famous game, *The Hobbit*, together with our recently published book "A Guide to Playing *The Hobbit*", which while giving a solution to the game, does not give the solution, so not spoiling the enjoyment of the game for the player.

---

## Micro Business Stand No: B4/A5

Quadrant House, The Quadrant,  
Sutton, Surrey  
Tel: 01-661 3139  
Telex: 892084  
Sales contact on stand:  
Ken Walford

*Micro Business* is the U.K.'s leading dealer monthly. With a precisely targeted, dealer only, controlled circulation, *Micro Business* provides the most cost-efficient way of reaching dealers.

For details of how *Micro Business* can help you sell to dealers, see us on the Electrical-Electronics Press Stand No. B4/A5, or telephone Ken Walford on 01-661 3139 for details.

---

## Micro Dealer U.K. Stand No: 407

Unit 6,  
Marlborough Road Trading Estate,  
Lattimore Road,  
St Albans, Hertfordshire  
Tel: (0727) 34351  
Telex: 8813271 Gecoms G

Micro Dealer U.K. is one of Britain's biggest home computer software distributors to the individual retail market. It publishes Britain's only top-50 weekly software chart, distributed to over 1,600 outlets every Monday. Micro Dealer U.K. will be displaying its up-to-date range of home computer software for the ZX-Spectrum, Commodore 64, Oric Atmos, Electron and other top selling computers.

All retailers anxious to keep up-to-date with the home computer software market are welcome to discuss their requirements with Neil Johnson. In addition, all international distributors or retailers are

welcome to discuss their requirements with our international sales manager, Jeremy Cooke.

---

## Micro Power Stand Nos: 985, 987, 989

Northwood House, North Street,  
Leeds LS7 2AA  
Tel: (0532) 458800  
Sales contact on stand:  
Christopher Payne

Micro Power, a market leader in games software for the BBC Micro and the Electron, is now making major efforts to obtain a substantial share of the Commodore 64 software market.

The first batch of top quality machine-code games for the Commodore 64 cost only £6.95 each and will be on show at the stand. For the BBC Micro new titles on show will include *Rubble Trouble*, *Stock Car*, *Blockbuster* and *Frenzy*; *Electron Invaders* for the Acorn Electron will also be available. All five titles retail at £7.95 each.

Representatives will be on hand at the show to talk business with any interested programmers.

---

## Microdeal Stand Nos: 453, 455, 552, 554

41 Truro Road,  
St. Austell,  
Cornwall, PL25 5JE  
Tel: (0726) 3456  
Telex: 95395  
Sales contact on stand:  
Alan Hobbs

A massive 15 foot spacecraft will be featured on the Microdeal stands, dominating the main entrance at the Earl's Court Computer Fair. It has been designed by the Amazing Exhibitionists, and incorporates large exterior screens on which an intriguing two-way television system will enable visitors to talk personally to Microdeal's Cuthbert — the bespectacled whizz-kid featured in their top-selling computer games.

Microdeal will be running a special challenge for clued-up members of the technical press. Explanations of how two-way TV operates are invited and the nearest to the real thing will win a bottle of ten year old malt whisky or VSOP brandy.

For junior punters at the show, Microdeal will be running a Cuthbert

look-alike contest with the possibility of advertising and personal appearance engagements to follow.

Over twenty-one new programs for leading makes of home computer including many for the Commodore 64, will be on show. They will also be demonstrating *Buzzard Bait*, a show-stopping new jousting game which comes equipped with Microdeal's new software key — a device to beat the pirates.

---

## Microware Stand Nos: 201, 302

637 Holloway Road,  
London N19  
Tel: 01-272 6398  
Telex: 297598 Microw G  
Sales contact on stand:  
Mr Flannigan

Microware will be showing a full range of business systems including the IBM PC and XT with open access, and Lotus 123.

In addition, Microware will be showing off the DDFS for the BBC Micro, together with a full range of drives.

---

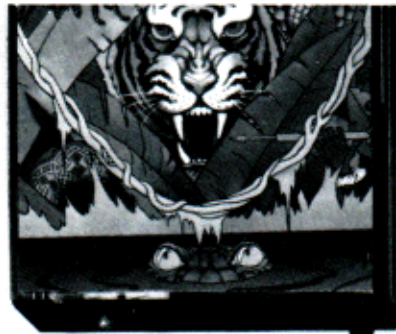
## Mikro-Gen Stand No: 452

44 The Broadway,  
Bracknell, Berkshire  
Tel: (0344) 427317  
Sales contact on stand:  
Paul Denial

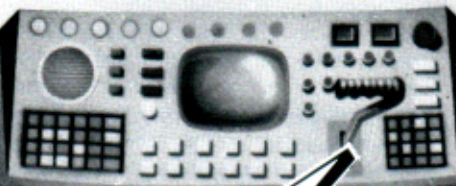
Mikro-Gen, the long-established producers of Spectrum software which includes the Sinclair/Psion chess, is showing the now top seller *Automania* featuring *Wally Week*, available on the Spectrum and Commodore 64. Already *Wally* has established himself as an outstanding character and people are begging for the sequel, and asking whether he will appear on other machines.

It is also showing *ATC*, the most definitive *Air Traffic Control* program ever produced, being written by a former air traffic controller — who better? The program is beautifully packaged and contains keyboard overlay and 24-page book of instructions. If you can survive the one hour each simulation lasts you may feel justified in applying to Heathrow or Gatwick for a job.

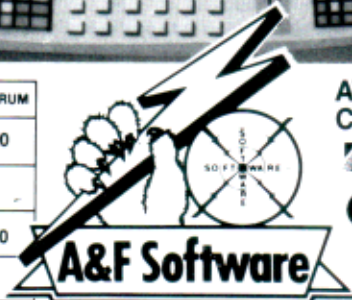
Witch's Cauldron puts you in the position of a frog trying to change back to a human by answering clues or drinking brews, changing through various forms to return to your original identity — a sure winner



# ...Beam us down to A&F Software!



	CM64	BBC	ELECTRON	DRAGON	SPECTRUM
CHUCKIE EGG	£7.90	£7.90	£7.90	£7.90	£6.90
CYLON ATTACK		£7.90	£7.90		
JUNGLE FEVER					£6.90
PHAROHS TOMB		£7.90	£7.90		



AVAILABLE FROM ALL GOOD  
COMPUTER SHOPS

John Menzies

**Boole** Selected Stores

Unit 8, Canalside Industrial Estate,  
Woodbine Street East, Rochdale, Lancs.  
OL16 5LB. Tel: 0706 341111



Sold subject to A & F Software Ltd. Full terms and conditions available on request



appealing to all ages. Ask on the stand for further details of new programs, as well as established favourites like Laserwarp, described as the Rival to Arcadia as the best Spectrum shoot 'em up available.

## The Miniature Tool Company Stand No: 663

26 Queensway Station Parade,  
Edgeware, Middlesex HA8 5N2  
Tel: 01-951 1183  
Sales contact on stand:  
Derek Proops

Specialist suppliers of computer cassettes, computer leads, D-plugs, edge connectors, etc. Send for mail order lists.

## Mr Floppy Stand No: 969

London Road,  
Brandon, Suffolk  
Tel: (0842) 810415  
Sales contacts on stand:  
Bill Custer, Mike Eden

Mr Floppy is packaged in both the 50-pack point-of-purchase display and the 10-pack box. The Mr Floppy single pack was conceived as an item to be sold in computer stores, department stores, etc. The packaging is designed for the home or business user who does not require diskettes in large quantities. One of the major problems of this type of product is the unintentional fingerprinting of the media source on the disc. With this unique packaging we have eliminated 99 per cent of errors caused in transporting the product.

Mr Floppy is manufactured in the U.S. and packaged and tested in England. Mr Floppy single pack comes in single sided/double density, 40 track, double sided/double density, 80 track and School pack. All other discs are available, and each Mr Floppy has a lifetime guarantee. Each sale is backed by Mr Floppy technical support.

Mr Floppy discs are manufactured on only the most modern machinery; starting with premium magnetic base material, using the industry's most advanced burnishing techniques to flatten those microscopic peaks and provide a glass smooth, even surface for head conformance.

## News-Soft Stand No: V2

196 Milburn Road,  
Ashington,  
Northumberland NE63 0PH  
Tel: (0670) 812194  
Sales contact on stand:  
Mr Gilfillan

New-Soft will have on show interfaces which enable most computer owners to use Atari-type joysticks. It will also be exhibiting the Quickshot II joystick which was voted a winner by the *Computer and Video Games* joystick jury.

Besides joysticks and interfaces it will also have a range of keyboard dust-covers for most popular micros. Software, books and magazines covering most micros will also be available.

## No Man's Land Stand No: 566

110 bis, avenue du Général Leclerc  
93500 Pantin, France  
Tel: (1) 840 24 31  
Telex: 213188 Bernis F  
Sales contact on stand:  
Denis Thebaud

No Man's Land is one of the leading French software houses for Oric-1/Atmos, Spectrum, ZX-81, Commodore 64, Vic-20 and Dragon. The French market is one of the largest in Europe and we are really going from strength to strength.

The most popular machine in France is the Oric-1/Atmos and around 20 different programs for this machine will be available on our stand in English, French and German — so come and try them out!

## Ocean Software Stand Nos: 442, 444

Ocean House, 6 Central Street,  
Manchester 2, M2 5NS  
Tel: 061-832 6633  
Telex: 669977 Oceans G  
Sales contacts on stand:  
David Ward, John Woods,  
Paul Finnegan

Ocean is a leader in games software for the most popular home-micros, especially Sinclair Spectrum and Commodore 64. It reached the top of the charts in the autumn of last year with its Kong game, and followed up with the big Christmas hit, Hunchback, licensed from the

Arcade manufacturers.

Ocean has used its knowledge of sales and marketing to build a strong software publishing company, producing games in-house but also acting for freelance writers and other software houses as the best vehicle for reaching the games-buying market in Europe, Australasia and North America.

Current smash-hits include Chinese Juggler, Pogo, Cavelon and Gilligan's Gold, all original Ocean games and mostly sold worldwide. Ocean's products are backed by blanket support advertising in the specialist computer press, national newspapers and on television, and the Ocean symbol is emerging as one of the top brand-names in this new and exciting industry.

## Opus Supplies Stand Nos: 729, 828

158 Camberwell Road,  
London SE5 0EE  
Tel: 01-701 8668  
Telex: 295931 Unicom G  
Sales contact on stand:  
Chris Hoar

Opus will be exhibiting its highly successful double-density disc interface for the BBC Micro. Specially developed by us, it effectively doubles the capacity of your disc drive and means that we can offer you a drive with an interface at unbeatable value for money prices. A disc interface is also now available for the Sinclair Spectrum, which will allow you to use this computer with any of the disc drives we are currently supplying. The Electron interface is currently being developed — ask us for further details.

Opus drives have gained an enviable reputation for quality and reliability. Our full range including the 3in drive will be available at the show. And as usual you can be sure of tremendous value for money by buying from us.

We will also be selling JVC RGB colour monitors, medium and high resolution; monochrome monitors; floppy discs and the organiser desk.

We would welcome dealer and educational enquiries on all of our products.

A stand not to miss!

## Oric Products International Stand Nos: 443, 445, 447, 542,

# Electronequip

(Authorised BBC Dealer, and service centre)

SEE US ON STAND 646  
ALL PRICES REDUCED

## NEW EXTENDED TEL. ORDER SERVICE

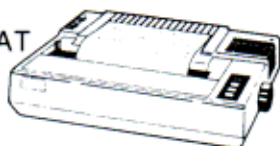
6 sales lines manned to  
10.00pm Monday to Friday

\* SPECIAL OFFERS  
Mail order only

### \* EPSON

**RX-80FT** £245.52 + VAT

**FX-80** £365.09 + VAT



Printer price includes cable for BBC and screen  
dump rom is available for £7.50

## 2 FREE ACORNSOFT GAMES WITH EVERY BBC SOLD \*



Electronequip is an authorised Acorn service centre  
and has been an Acorn dealer since the introduction  
of the Atom. Our demonstration facilities include 20  
station Econet and Torchnet systems.

Ref.	BBC Micros	Ex VAT	Inc VAT
ANB01	BBC Model B Micro Computer	348.26	399.00
ANB02	BBC Model B with Econet Interface	389.14	446.00
ANB03	BBC Model B with Disc Interface	426.59	489.00
ANB04	BBC Model B with Disc & Econet Interface	467.45	536.00

## VOLTMACE DELTA 14B

\*10% off listed prices



JSVOLT 14	Voltmace Delta 14B Joysticks .....	13.00	14.95
JSVOLTAD	Voltmace 14B/1 Adaptor Box .....	12.91	14.85

TRADE ENQUIRIES WELCOME  
Access & Barclaycard Accepted  
Large Stocks - 24 Hour Despatch  
Carriage 50p

**3" Micro Disc £129.95**  
(inc. VAT)

**Disc Interface &  
Drive**  
£198.95 (inc. VAT)



Micro Disc Drive for the BBC Micro

The Micro disc drive offers a method of low cost quick access to  
programs. The drive is essentially a small version of a 5¼" disc  
drive and offers similar features to the larger drive.  
The data is stored on a 3" disc, this is enclosed in a protective  
hard plastic cassette which features a write protect switch.  
The micro drive requires the standard Acorn disc interface, but a  
new disc filing system rom. Acorn DFS may be exchanged for the  
micro DFS for £12.00. The new micro disc filing system can read  
and write to Acorn DFS discs.  
Thus if a 5¼ inch and a micro floppy were connected on the same  
cable files could be transferred between them.  
**Capacity: 80.64 K bytes Transfer Rate: 125k bit/s.**

### BRANCHES

**FAREHAM: 59 WEST STREET (0329) 230670**  
**KINGS LYNN: 17 TENNYSON AVE. (0553) 3782**  
**MAIL ORDER: 36-38 WEST STREET**  
**FAREHAM, HANTS. (0329) 230670**

**Kings Lynn Branch**  
**Tel: 0553 3782**



# Electronequip

36-38 West Street, Fareham, Hants (0329) 230670



# 544, 546

**Coworth Park,  
London Road,  
Ascot, Berks. SL5 7SE  
Tel: (0990) 27641  
Telex: 847489  
Sales contact on stand:  
Rosalind Zawadska**

Atmos, the new £170 48K British microcomputer launched last January, is being shown by Oric Products International, together with peripherals and latest Oric software. The new £299.95 320K 3in micro disc-drive system which includes DOS, manual, games and business disc software, is on display, in addition to Oric's £150 four colour printer which has been re-styled in the new house colours of black and red to match the Atmos and disc drives.

Superceding the Oric 1, of which more than 170,000 were shipped during 1983, the Atmos incorporates a number of new features and refinements, the most obvious being a professional full-pitch typewriter keyboard, and the re-styled case in black and red. Although a large number of basic programs are totally software compatible with the Oric 1, the Atmos has a new ROM operating system which, claims Oric, greatly enhances the performance over the original Oric 1. Several new commands including Print, user controlled auto repeats, and new cassette facilities have also been incorporated. The Atmos comes with a new user manual published by Pan Books, and a beginners leaflet.

On the stand, Oric will be demonstrating the latest Oric software, including games, business, and education packages.

## Ozwise Computers Stand No: 609

**236 Imperial Drive,  
Rayners Lane,  
Harrow, Middx.  
Tel: 01-429 1060  
Sales contact on stand:  
Sylvia Leech**

From their extensive range of Apple, Sirius, Apricot, IBM, Epson and BBC products, Ozwise have chosen the latest and most innovative to display. The new Apple Macintosh will be on their stand together with Lisa 2, both machines outstanding in their ease of use (come and try out the Mouse!) and for their amazing graphic facilities.

From the portables we will be showing the new Apple IIC with built-in disk drive giving it access to the enormous Apple software base, and the battery-powered Epson PX-8 with 80 character by 8 line LCD display.

Demonstrations of each system will be available on the Ozwise stand where staff will be on hand to help you choose the system which best suits your individual needs. With eight years experience in the professional computer world they are well equipped to answer your questions and to provide you with full customer support.

Also available on the stand will be the latest edition of the Ozwise Newsletter which is free of charge and includes news and reviews as well as a full price list.

## Phoenix Software Stand Nos: 743, 745

**Spangles House,  
116A Marsh Road,  
Pinner, Middlesex  
Tel: 01-868 3353  
Sales contact on stand:  
Mitchell Symons**

Phoenix Software presents a range of action/adventure games wherein a player must progress through a specified number of skill levels of an arcade cassette before achieving the running code for the adventure cassette. In a specially designed two cassette pack retailing at £9.99, the games are genuinely interlinked. The story-line runs right the way through the program and clues, vital to the solution of the adventure, are liberally sprinkled through the arcade game. Everything for the arcade player; everything for the adventurer.

Commodore 64: The Sorcerer's Apprentice, Quest For The Garden Of Eden, Attack On Windscale; Spectrum 48: Jokers Wild, Dodge City;

Dragon 32: Death Mines Of Sirius, If I Had A Million, The Emperor Must Die, Mission Moonbase; Vic-20: Four Gates To Freedom, The 'O' Level Caper.

## Picturesque Stand No: V6

**6 Corkscrew Hill,  
West Wickham,  
Kent BR4 9BB  
Tel: 01-777 0372  
Sales contact on stand:  
Martin J Ridout**

Get to grips with Spectrum machine code. Our easy-to-use Editor Assembler has been re-written, and now contains microdrive commands as well as cassette routines. Other improvements include assembly from microdrive or cassette, for very large programs, and better auto-line and renumbering facilities.

Beat the bugs in your machine code with our Spectrum Monitor. Also completely re-written, this popular program now features single stepping through ROM or RAM. Both the Assembler and Monitor cater for all the popular Centronics printer interfaces, as well as the ZX Printer and RS-232 printers via interface 1. All this for the same price as the original programs.

## Pilot Software Stand No: 654

**32 Rathbone Place,  
London W1P 1AD  
Tel: 01-636 2666**

Based only a short stroll from Tottenham Court Road underground station, we offer the finest range of software for all the popular microcomputers. Our expert assistants in the entertainment field are backed by a wealth of experienced business consultants. No longer do you have to furtively sneak into a shop dodging the aliens; at Pilot, the whole family is catered for. We are here to advise and help on everything from games through a wide selection of educational software, up to the latest and best of the business market. Open six days a week (10am to 7pm weekdays and 10am to 5pm Saturday) no problem is too small or too large to tackle. If your requirements indicate specially adapted or written software, then our development team is also on hand to discuss your needs. So, why not drop in for a chat or a demonstration, so that you, too, can make the most of your micro?

## Practical Computing Stand Nos: 109, 127, 210, 226

**Quadrant House,  
The Quadrant,  
Sutton, Surrey.  
Tel: 01-661 3021  
Telex: 892084  
Sales contact on stand:  
Ian Carter**

Practical Computing is the magazine for those with a serious interest in personal computers and who are putting them to work in business, the professions, administration and education.

With an audited circulation of 52,761 (ABC) Practical Computing has attracted a body of mature readers committed to the practical use of personal computers. So, if you wish to sell your products to such people rather than schoolboys and hobbyists, why not visit the stand to pick up a copy of our brochure and to discuss your advertising requirements.

## Prentice-Hall International Stand No: 873

66 Wood Lane End,  
Hemel Hempstead,  
Hertfordshire HP2 4RG  
Tel: (0442) 58531  
Telex: 82445 Prenhi G  
Sales contact on stand:  
Sue Osborn

Prentice-Hall International is one of the leading publishers of books in the field of computer science. There will be many titles on display relating to both business and home use of the computer including books on IBM, Commodore 64, Vic-20, TI/99, Atari, etc.

## Protek Computing Stand Nos: 238, 242

1A Young Square,  
Brucefield Industrial Park,  
Livingston, West Lothian  
Tel: Livingston 415353  
Telex: 727559 Protek G  
Sales contact on stand:  
Nick Gregory

Protek Computing will be exhibiting and demonstrating a number of major new accessories and software. The 1200 modem at £59.95 with two operating speeds mode 1-1200/1200 and mode 2-1200/75 — acoustic coupling, also connects to any standard RS-232 interface: Spectrum (interface required), Atmos (interface required), BBC (cable only required), Electron (interface required), CBM 64 (cable only required), Vic-20 (cable only required).

Commodore cassette interface, at £9.95, includes Load and Save plus remote for the CBM 64 and Vic-20. It plugs into any computer compatible

cassette recorder.

The ZX Spectrum switchable joystick interface at £19.95. You simply plug in and flick a switch for compatibility with Kempston, Sinclair Interface 2 and Protek AGF (cursor keys) joystick operating systems. No software patch tapes or programming required.

The BBC joystick set at £19.95 includes the Protek BBC joystick interface and Spectravideo Quickshot joystick. It is compatible with all popular games, has attractive gift packaging and includes Atari D type 9-pin connector.

Other products on show will include: ZX Spectrum joystick set at £24.95; Commodore compatible cassette recorder at £29.95; software titles including Hunter Killer for CBM 64, BBC and ZX Spectrum; Airliner for CBM 64, BBC and ZX Spectrum. So why not pay us a visit. Dealer, wholesale and export terms available on request.

## Quicksilva Stand Nos: 243, 342, 344, 346

Palmerston Park House,  
13 Palmerston Road,  
Southampton,  
Hampshire SO1 1LL  
Tel: (0703) 20169  
Telex: 477889 Qsilva

Yet another Earls Court has arrived. The Quicksilva satellite has been moved into geostationary orbit above London, you can see it if you look up tonight, and we've recalled our operatives, the famous Game Lords, back from the corners of the galaxy to attend the show.

Since last year we've had our own planet built in the Sirius System, you are welcome to call in if you are passing anytime. The planet is called Drolemag in honour of the Legendary Game Lord of the third century BC who spoke backwards.

With the calling together of the Game Lords we've gathered some great tales and the very best of these have been converted into games for your home computer, so drop in on our stand and have a chat with the legendary Game Lords. Finally, just a word of warning, keep clear of the purple things that go "FFGGGTTTHH-DDDDDDDDUMNFNNART".

## Ram Electronics Stand No: V4

106 Fleet Road, Fleet,  
Hampshire GU13 8PA  
Tel: (02514) 5858

## Sales contact on stand: Martin Shoebridge

Ram Electronics will be launching its new Spectrum Turbo interface. This superb new product has already been launched in most magazines and is already a sell-out. Turbo is set to become the No. 1 interface for the Spectrum. It overcomes all the short-comings of other interfaces. It combines protocols such as inport 31, cursor key, interface 2 — IN 63486 plus IN61438, into one, providing compatibility with almost all software available today, and it's the only interface to work with Quickshot II rapid fire joystick, using rapid fire mode.

In addition, it has a full expansion bus at the rear, interface 2 has only a printer port, enabling connection of any interface — ram pack, micro-speech, etc. The unit also has a full custom-designed chip inside enabling us to provide fantastic value for money at £22.95 inc. VAT. Remember Turbo will be THE standard interface for Spectrum. See our stand in the Sinclair Village for our special show offers on Turbo and Quickshot II rapid fire joysticks. Ram will also have Vic-20 switchable 16K and 32K rampacks for sale — another world-beating product.

## Ricoll Electronics Limited Stand No: V52

48 Southport Road,  
Ormskirk, Lancashire L39 1QR  
Tel: Ormskirk (0695) 79101  
Telex: 627827  
Sales contact on stand:  
Mr E. Bulmer

Ricoll Electronics Limited will be showing three products at the exhibition. These are: Metal case keyboard with space bar, Programmable Filtered Sound Generator and Sound Sampling Unit. The keyboard is housed in a coffee coloured case, its cream keys are guaranteed for 50 million operations — a pretty high degree of reliability. It also features a proper space bar, with an extra Shift key on the right.

Sound boards are obviously very useful when it comes to improving the 'playability' of computer games and Ricoll's does more than most. It'll produce the kind of music and sound effects normally to be found only on full-size monophonic synthesisers. The gadget includes three oscillators (programmable from 0.01Hz to 62KHz) and gives a square wave output. Other notable features include a noise generator, envelope

# TURBO CHARGE YOUR SPECTRUM



## Outperforms any Spectrum interface

The unique Turbo interface from Ram gives you all these features – and more – in one unit:

- \* A variety of interfaces including: Rom cartridges, two 9-way D plugs for standard joysticks, PLUS full expansion bus at rear.
- \* Compatible with Kempston and Protek protocols.
- \* Works with latest Quickshot Mk II auto rapid-fire joysticks!
- \* Choice of Rom cartridge or tape cassette software.
- \* Instant program loading with cartridge software.
- \* Built-in power safety device – unique to Ram Turbo.
- \* Full one year guarantee.
- \* Immediate availability – 24 Hr:despatch on receipt of P.O./ credit card details (cheques – seven days).
- \* Incredible value – only £22.95.

So don't wait around – simply complete the coupon and send it to us today.



Or call our credit card hot line on 02514 25252. (Access and Visa welcome).

Ram Electronics (Fleet) Ltd, 106 Fleet Road, Fleet, Hampshire GU13 8PA.

Please send me:

\_\_\_\_\_ Spectrum Turbo Interface(s) at £22.95  
+ £1 p+p (overseas orders £3 p+p)

\_\_\_\_\_ Quickshot II Joystick(s) at £9.95  
(Only when purchased with Turbo – normally £12.95 + £1 p+p)

I enclose cheque/postal order or charge my Access/Visa for: £ \_\_\_\_\_



Name \_\_\_\_\_

Address \_\_\_\_\_

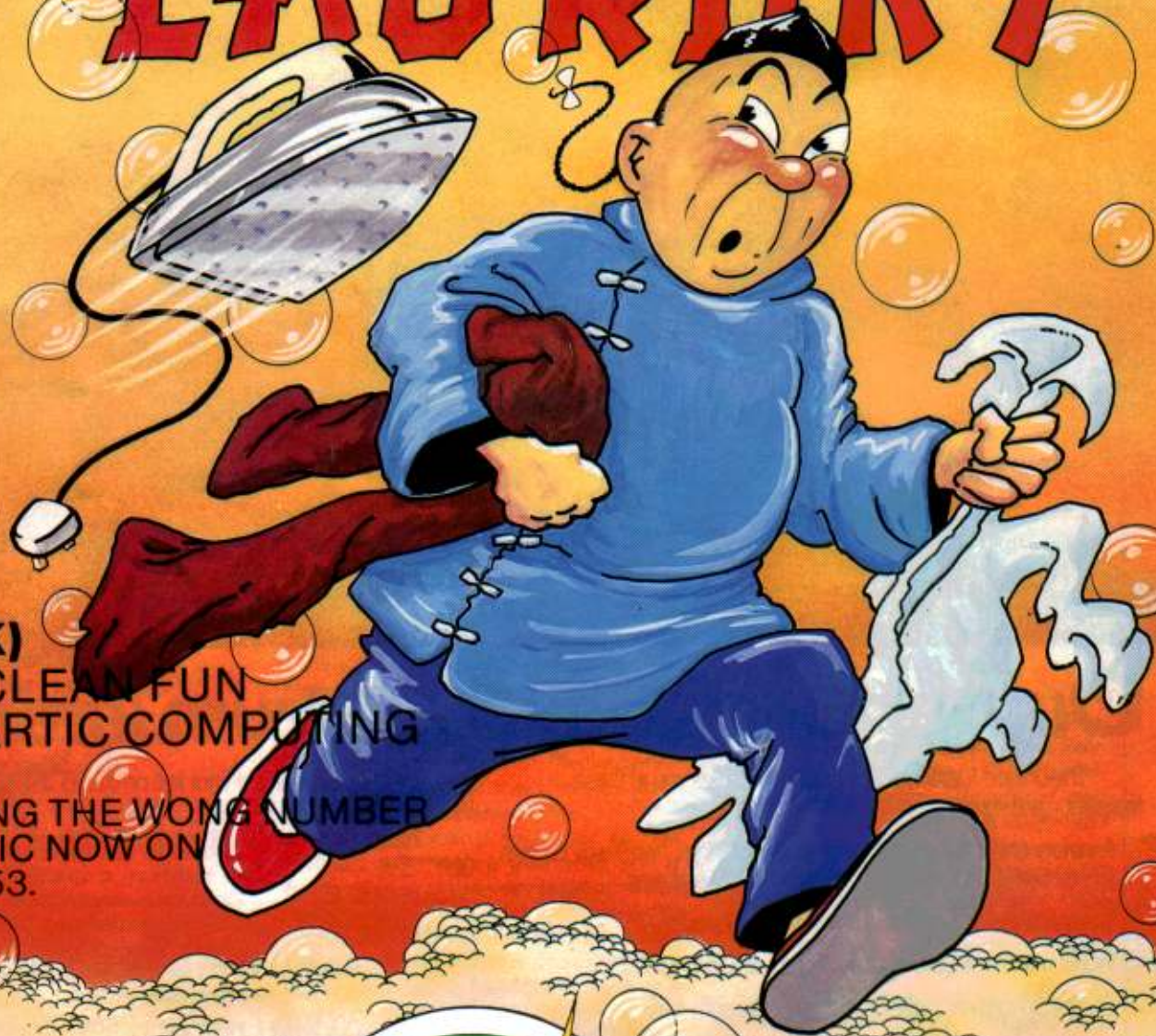
Tel \_\_\_\_\_

To: Ram Electronics (Fleet) Ltd, 106 Fleet Road, Fleet, Hampshire GU13 8PA.

See us  
on  
Stand V4

Trade and export enquiries welcome.

# MR. WONG'S LOOPY LAUNDRY



**£6.95  
(16/48K)**

**GOOD CLEAN FUN  
FROM ARTIC COMPUTING**

**DON'T WING THE WONG NUMBER  
WING ARTIC NOW ON  
0401 43553.**

## ARTIC COMPUTING LTD

Main Street, Brandesburton, Driffield YO25 8RL

Cheques and PO's payable to Artic Computing Ltd.  
Dealer enquiries welcome.\*  
Access and Barclaycard welcome.

WARNING: These programs are sold according to  
ARTIC COMPUTING LTD's terms of trade and  
conditions of sale. Copies of which are available on  
request.

Send S.A.E. (9in. x 6in.) for FREE catalogue of  
our wide range of programs.



To: Artic Computing Ltd, Main Street  
Brandesburton, Driffield YO25 8RL

Please supply

\*Cheque for total amount enclosed £

Name

Address

\*Access/Barclaycard No.

\*Please delete or complete as applicable

shaper, three audio channels with programmable volume, internal audio amplifier and a 16-bit I/O port. Combine all this lot with the programmable filter and you'll be synthesising many sounds that rival units will be unable to generate.

On the subject of sound 'extras' there's Ricoll's Action Replay box which plugs into the Spectrum's expansion port. It's not actually a sound synthesiser, and is used to generate 'real' sound effects. Using a microphone, a sound can be input and sampled, sorted in memory and then replayed at any pitch. The most interesting feature is the device's ability to create glitch-free tape loops for producing the most amazing sound effects.

## Romantic Robot Stand No: V48

113 Melrose Avenue,  
London NW2 4LX  
Tel: 01-450 1605  
Sales contact on stand:  
Alexander Goldscheider

Romantic Robot fills a genuine gap in the Spectrum software market with a package of four machine utilities called Trans-Express.

Trans-Express is an essential microdrive-to-microdrive (even if you only have one microdrive), Microdrive-to-tape and also tape-to-tape. Trans-Express extends the capabilities of microdrives, adds extra features typical for disc drives and helps to make the tapes redundant. It is an invaluable software back-up utility.

## Romik Software Stand Nos: 537, 634, 636

272 Argyll Avenue,  
Slough SL1 4HE  
Tel: (0753) 71535  
Sales contacts on stand:  
Mike Barton, Alan Gray

Romik will be exhibiting its full range of software for 11 micros, which include the Amstrad CPC 464. Over 60 titles will be available.

The Multisound Synthesiser for the unexpanded Vic was one of Romik's original launch products. Its namesake converts the CBM 64 into a versatile musical instrument on which even an inexperienced user can quickly learn to produce a wide variety of sounds. Many musical instruments can be emulated, including flutes, pianos and guitars. At

£14.99 the Multisound Synthesiser will become a very popular CBM 64 utility.

Another new utility for the CBM 64 is the Graphics Editor, also £14.99. It is divided into three parts. The Character Editor has two screens which allow you to redraw each available 64 character. You can then use the Screen Editor to experiment with a whole screenful of characters. The Sprite Editor has a blank screen on which to build your sprites and the four available sprite sizes are displayed alongside. There's plenty more in Romik's utility pipeline, including an Assembler package which is close to completion.

And don't forget Romik's games. Galaxia and Blockbusters will be added to its wide range of Vic-20 arcade and adventure games. For the CBM 64 there is Anter-Planter, a new style arcade game, plus Romik's first 64 war game, The Great Nordic War. Amstrad titles will include Alien Break-in and Atom Smasher. Other new releases include Beacha for the 48K Spectrum, Caterpillar and Shark Attack for the BBC B, and Electron and Loch Ness Monster for the Atmos.

## Saga Systems Limited Stand No: 555

Greenhaigh House,  
Woodham Road,  
Woking,  
Surrey GU21 4DL  
Tel: 04862 69527

Sales contact on stand:

Saga Systems Limited is launching a wide range of new micro hardware at the Computer Fair. Since the recent Midland Computer Fair in May at the N.E.C. Saga's product range has almost tripled.

For the Spectrum: Saga i Emperor. This keyboard provides an extra 28 single-entry function keys over the standard 40, giving a total of 67. It has a life expectancy of 20 million key operations and is available ex-stock.

Soundboost provides added realism, adjustable from a whisper to a roar through the television.

For the Apple: Commander is a professional keyboard for the Apple II(+) with 15 extra function keys and a full 6ft+ flex to be used as a replacement or in parallel with the existing keyboard.

High quality monochrome and RGB colour monitors with "Green-switch" for Wordprocessing available for the BBC, Oric, Electron, Commodore 64, VIC 20 and Video.

For OEM's: An 8 Bit 4MHz card, the ZED, will be on show and an

enhanced version — the ZED 2 is to be announced shortly.

A 16-Bit card is being announced — a Concurrent Multi-User CP/M 80186 system which runs MS-DOS or Xenix.

Keyboards — A range of fully programmable keyboards and an IBM PC keyboard, will also be on show.

## Shards Software Stand No: 737

189 Eton Road,  
Ilford, Essex  
Tel: 01-514 4871  
Sales contact on stand:  
A D Bullock

Shards Software is rapidly establishing a reputation for quality strategy games, Adventures and educational software for the BBC B, Dragon, Electron, Spectrum and CBM 64. Our Fun-to-Learn educational series has attracted universal acclaim in educational circles, and distinguishes itself in content and entertainment value.

A sequel to Pettigrew's Dairy, our epic Dragon adventure, will be released at the show, along with other new releases for the BBC B, Spectrum, Electron and CBM 64. We will also be running an end-of-season sale with massive reductions. We wish to welcome old and new friends at our stands so please come and pay us a visit. There will be special treats for the young and not so young!

## Silicon Valley Computer Centre Stand No: 402

Suite 104-105,  
16 Baldwins Gardens,  
Holborn, London EC1 7RJ  
Tel: 01-242 2803  
Telex: 8813271 Gecoms G  
Sales contact on stand:  
Nick Cardwell

Silicon Valley Computer Centre has recently moved from Baldwins Gardens to 164 Grays Inn Road. From these new and larger premises it continues to provide a comprehensive service for the business and professional user of the micro-computer.

Its wide range of microcomputers, hard discs and associated products is complemented by a selection of software to suit all needs. For those users requiring bespoke software it writes programs; and for

specialised accounting and stock control functions there are a selection of single and multi-user packages which may be tailored to the client's needs.

If you wish to rent, lease or buy a computer, Silicon Valley will evaluate your needs and provide the system right for you. It will install the hard and software, and provide training where necessary. For those not sure whether a microcomputer is the right decision, the system may be rented and purchased at a later date with a rebate on the rental.

Silicon Valley is committed to supporting its customers, it provides maintenance in the Greater London Area, and has a team of experts to advise on all problems. It regards the purchase of microcomputers as the beginning of a relationship with a client-customer support being the essence of this.

## **Sinclair Research** **Stand Nos: 426,** **428, 434, 436, 327,** **329, 335, 337**

**Stanhope Road,**  
**Camberley,**  
**Surrey**  
**Tel: (0276) 685311**

The principal exhibit will be the Sinclair QL, Sinclair Research's latest computer, designed for the serious home, business or educational user. Available by mail order only, it sells for £399.00, inclusive of VAT which covers both the computer and a suite of four software programs.

Other exhibits include the ZX Spectrum, ZX Microdrive, ZX Interface 1 and 2 and various software titles.

Orders will be taken for all the above products. New software titles only will be sold over the counter.

## **Spool Ltd** **Stand No: 836**

**Mulberry House,**  
**Canning Place,**  
**Liverpool L1 8JB**  
**Tel: 051-709 6288**  
**Sales contact on stand:**  
**Roy Varley**

Total capability and commitment in data duplication is the best description of Spool. Cassette and disc software duplication is undertaken on advanced technology dedicated data duplication systems and pro-

cessing equipment, aided by the expertise of professional engineers who understand data duplication totally.

This combination, together with quality control testing at all points in the process together with a 'zero defect' procedure, produces a finished product which is totally reliable.

The company currently duplicates for major software publishers, hardware manufacturers and numerous small publishers who require the quality and the capacity to supply quantities on time.

A current major problem in the cassette software market is copying, and both advice and protection (together with fast loading systems) are available.

Many specialised packaging formats (eg wallets, boxing, shrink overwrap etc.) are also available as are storage and distribution facilities.

## **Stack** **Stand No: 755**

**290-298 Derby Road, Bootle,**  
**Liverpool L20 8LN**  
**Tel: 051-933 5511**  
**Telex: 627026 Stack G**  
**Sales contact on stand:**  
**Frank Coward**

On the stand, Stack has some good news for Spectrum users — a future Stack product on display. The Stack Lightpen for the 48K Spectrum with full free-hand draw software promises to become the market standard. Unlike lightpens currently available, the future Stack Lightpen will not use the slow and inaccurate scanning method. Instead, using the tried and tested touch contact method, it will return the X and Y coordinates within 1/50th of a second enabling true free-hand drawing.

As well as this revolutionary addition the rest of the popular Stack accessories will be displayed. The Stack Light Rifle for the Spectrum, CBM 64 and Vic-20, together with the other Stack Lightpens will be available from our stand.

The Stack Peripheral Interfaces for CBM 64 and Vic-20 enabling Centronics, Serial or IEEE-488 devices to be run from these popular micro's, will be on display together with the range of CBM 64 utility cartridges, as used by the top games software houses.

The extensive range of Stack Dustcovers together with a Unique Display stand for trade customers completes the Stack stand. Stack accessories are currently available from W H Smith, Menzies, Dixons,

Prism, Spectrum Dealers, Greens, Tesco and Lighting.

## **Sunshine** **Publications/Books** **Stand No: 347**

**12/13 Little Newport Street,**  
**London WC2R 3LD**  
**Tel: 01-437 4343**  
**Telex: 296275 Sunrgy G**  
**Sales contact on stand:**  
**Duncan Scot**

The latest issues of "Popular Computing Weekly", "Commodore Horizons", "Dragon User" and "Micro Adventurer" will be on sale on the stand. Editorial staff from all the magazines will be there to answer any queries you may have. A selection of back issues of the magazines will also be on show.

New Sunshine books on sale for the first time will include: "Machine Code Graphics and Sound on the Commodore 64", "Machine Code Sprites and Graphics for the ZX Spectrum", "Spectrum Music", "The Business Computer Guide", "AI on the Spectrum", "Inside Your Spectrum" and "Home Applications on Your Micro". Special discounts on selected titles will be available at the show.

## **Tansoft** **Stand Nos: 553, 652**

**Unit 1, The Techno Park,**  
**645 Newmarket Road,**  
**Cambridge CB5 8PB**  
**Tel: (02205) 2261/2/3/4**  
**Telex: 818891 Tansof G**  
**Sales contact on stand:**  
**Paul B Kaufman**

As one of the most prominent software houses for the Oric range of computers, Tansoft can now boast a software range of over 20 titles. The most exciting sale item is the highly acclaimed foreign language series available in French, Spanish, German and Italian. The new Chess game is now also available and features a word-synthesiser. Tansoft also produces the *Oric Owner* magazine which is the only publication for Oric enthusiasts. The 48K Atmos, printer and micro drives are on sale at our stand.

## **Transform Limited** **Stand No: V7**

**41 Keats House,**



**Porchester Mead,  
Beckenham, Kent.**  
Tel: 01-658 6350  
Sales contact on stand:  
Colin Hughes

Transform specialises in serious software for the ZX Spectrum which, being priced at only £129.95, means that even a small company can take advantage of the microchip era. Transform supply a complete range of software including Word Processing, Database, Filing, Accounts and Business Graphics, together with a full range of hardware for the Spectrum and QL including full-size keyboard, Centronics interfaces, printers, and monitors.

On our stand you will be able to meet John Campbell author of Masterfile, Robin Thompson author of Tasword Two and Pierre Marbot author of our new Superfile program. We will be demonstrating our newly acquired QL, together with our latest program for the ZX Spectrum which incorporates Invoicing Sales/Purchase Ledger and Price List. This program will enable you to type an invoice which will automatically be transferred to your customers account. Should you require information regarding the connection of your Spectrum to a

printer or monitor please do not hesitate to visit our stand for advice or telephone 01-658 6350 for further information.

## VNU Business Publications

### Stand Nos: 509, 606, 608, 610

53-55 Frith Street,  
London W1A 2HG  
Tel: 01-439 4242

Sales contacts on stand:  
Fiona Croll, Christopher Gould,  
Beverley Harper

VNU Business Publications brings you its successful microcomputer titles. *Personal Computer World*, Britain's biggest microcomputer magazine, covers the whole spectrum of microcomputing with news, reviews and bench-tests on current hardware and software. *Personal Computer News* is Britain's leading weekly microcomputer magazine, featuring regular top 20 sales charts, program cards and a pull-out library of microcomputing. *Computer Answers* is a lively and informative microcomputer magazine directed at the end user, and *What Micro?* is the definitive buyer's guide to micro-

computer hardware and software. *Personal Computer Games*, specialising in games software is the complete guide to micro entertainment.

## Vortex Software

### Stand No: 785

280 Brooklands Road,  
Manchester M23 9HD  
Tel: 061-973 9580  
Sales contact on stand:  
Luke Andrews

Visit our stand for high quality Spectrum games. We are proud to introduce in particular our latest and as yet unseen game, T.L.L. It will be worth the visit. Our staff will only be too willing to explain and show you the game.

## Widgit Software

### Stand No: 863

48 Durham Road,  
London N2 9DT  
Tel: 01-444 5285  
Telex: 295441 widgit  
Sales contact on stand:  
Tina Detheridge

Educational games for the Spec-

ONLY THE BEST BECOME A...

# FIGHTER PILOT

48K SPECTRUM  
BY D.K. MARSHALL

DIGITAL INTEGRATION

"Definitely the best simulation for the Spectrum yet... highly recommended"  
CRASH MICRO

# NIGHT GUNNER

48K SPECTRUM  
BY R.J. SWIFT

SEE US ON STAND V55

ONLY ACES SURVIVE IN ...

"Transcends addictivity"  
"A very clever game with plenty of scope and excellent value for money."  
GAME OF THE MONTH  
91% CRASH MICRO

Selected products available from: Boots, Woolworths, H.M.V., Menzies, W.H. Smith, Greens, Lasky's, Currys, Rumbelows, Selfridges, Spectrum Dealers, Video Palace, Zappo and all good computer shops

Distributors: Microdealer UK, Prism, Websters, Centresoft, Leisuresoft, P.C.S. and other major distributors

trum, for a variety of ages, plus two new tapes released for the show: Castle of Dreams — a brain teasing exploration for 11 year olds and above; and Adventure Playground — two absorbing explorations for juniors.

High quality graphics that are well tried and tested are the mark of Wigit Software. The tapes receive excellent reviews.

Available through W H Smith's, Boots and your local retailer.

See also the range of early learning programs, together with Pathfinder and The Humpty Dumpty Mustery.

## Your Computer Stand Nos: 109, 127, 210, 226

Quadrant House,  
The Quadrant,  
Sutton, Surrey.  
Tel: 01-661 3127  
Telex: 892084

Sales contact on stand:  
Shobhan Gajjar

With an audited circulation of 122,642 (ABC) Your Computer is Britain's biggest selling computer magazine. Every issue contains computer reviews, software evaluations, games, answers to readers' problems and pages of program listings to try out on your computer.

If you wish to reach the booming market for home computers and associated software costing less than £500, Your Computer must be your first choice for advertising. Nowhere else will you get such a high circulation at such a competitive rate. Shobhan Gajjar will be pleased to tell you more about Britain's No. 1 home computer magazine — and what it will do for you.

## LATE ENTRIES

### Chromasonic Electronics and Precision Software Stand No: 227, 326

48 Junction Road,  
Archway,  
London N19 5RD  
Tel: 01-263 9493

### Sales contact on stand: Lawrence Curtis

Our most popular computer is the Commodore 64 which will be displayed on our stand with one of the most comprehensive range of peripherals and software supplies, with a Chromasonic magnificent show offer. Come and see us.

There will also be a full range of printers covering Dot matrix and daisywheel with accompanying data. On display will also be the latest concept in the world of computers, namely the Apple Mackintosh and the new portable Apple II C. We will also be offering the latest IBM compatible 16-bit Sanyo computer with software, ie Wordstar, Mailmerge, Spellstar, Calstar and Infostar at an unbelievable price.

### Computer Junk Shop Stand No: 462

10 Waterloo Road,  
Widnes, Malton,  
Cheshire WA8 0PY  
Tel: (051) 420 4590

Sales contact on stand:  
Nigel Armitt

The Computer Junk Shop caters for the increasing number of people interested in electronics. The shop sells components, cables, power supplies, computer peripherals, both new and secondhand, together with more usual items such as lamps and batteries.

At a time when most people are striving to understand the introduction of computers, we are supplying components from the inevitable obsolescence of the rapidly changing technological age of the micro revolution. Of particular interest are the secondhand input-output devices which are necessary to make a relatively cheap microprocessor into a useful system.

The items on sale are mainly unused surplus stock acquired from major electronic manufacturers and secondhand items reclaimed from obsolete computer and electronic systems.

### Computer Portrait Systems Stand No: 617

73 Cranleigh Road,  
Feltham,  
Middlesex TW13 4QA  
Tel: 01-751 0917

### Memotech Stand Nos: 543, 645, 647, 747, 744, 746

Station Lane,  
Witney,  
Oxford OX8 6BX  
Tel: (0993) 2977  
Telex: 83372 Memtec G

The processor used in the MTX Series is the Zilog Z80A, running at 4MHz. The MTX512 comes with 64K RAM expandable to 512K. Add to this another 16K Videoarm dedicated solely to handling the screen memory and you've got 80K. How much RAM, is left when you've running high resolution graphics programs? The answer is still 64K, because the MTX 512 uses the 16K Videoarm plus a second CPU — the Texas TMS9929 — to take care of screen graphics.

The MTX512 contains 24K of ROM with four major functions. These are: MTX basic; "Noddy", a simple, text-handling language; an assembler/disassembler and the sophisticated "front panel" program. All four languages can be used interactively with each other and the user.

Powerful graphics commands controlling 32 sprites, eight windows and 16 colours on all screens are standard.

The MTX series is designed to expand, from the MTX512, via the cost effective CP/M based business systems, up to the powerful HRX graphics and video processor.

The RS232 communications board provides two independent RS232 ports, plus a 60-way disc drive bus, which supports up to four 5.25 and/or 8-inch floppy disc drives, plus instant access Memotech silicon discs, and hard discs with capacities up to 20 Megabytes.

### Northline Stand No: 868

139a Sloan Street,  
London SW1X 9AY  
Tel: 01-265 1707

### PC Corporation Stand No: 560

2 Kingston Road,  
Staines,  
Middlesex  
Tel: (81) 63212

# REPRINTS

a ready made sales aid



If you are interested in a particular article or advertisement in this publication why not take advantage of our reprint service. We offer an excellent, reasonably priced service. For further details and a quotation

**Ring Michael Rogers on 01-661 3457**



ST. GODRIC'S COLLEGE, HAMPSTEAD

## 3 Day Micro-Computer Courses throughout the year

Answering the questions that you and your company are asking today:

- Can a computer help my business?
- How do I choose the machine and software best suited to my needs?
- Will I have to reshape my business to fit the computer system?
- What is involved in getting a computer project off the ground?

The course includes Hands-On training, illustrated course notes, and instruction by experts at a College renowned for quality.

Please send me your brochure:

Name .....

Company .....

Address .....

..... Tel:.....

The Registrar, St. Godric's College, London NW3 6AD  
Tel: 01-435 9831. Telex: 25589.

Only the fastest win in....

# TITANIC GRAND PRIX

By the author of "Night Gunner" R.J. SWIFT

**COMING SOON!**

**SEE US ON STAND V55**

Motorcycle racing is on the Spectrum!  
This is the simulation that puts you on the hot seat racing for 1st position. To pass the winning flag you'll need all the riding skills.

**DIGITAL INTEGRATION**

Watchmoor Trade Centre,  
Watchmoor Road, Camberley,  
Surrey GU15 3AJ  
Telephone Camberley (0276) 684959.

# PREPARE TO MEET YOUR MARKET

**A**t the Northern Computer Fair you can be certain of meeting your market. Thousands of visitors will be drawn to the show by the extensive promotional activity planned prior to the exhibition.

You could be there to meet them when the doors of the show open on November 22, 1984 – just in time for the pre-Christmas spending spree.

And the exhibition is also a cost-effective way of making important trade contacts in the lucrative northern market.

So prepare to meet your market now by returning the coupon for further details – or call Chris O'Hea on 01-661 3125 right away.

## *THE Northern* **Computer** **Fair** *Personal computers* *Home computing* *Small business systems*

Belle Vue, Manchester. November 22-24 1984.

Sponsored by:  
Practical Computing,  
Your Computer,  
Micro Business.

Please send me further information on exhibiting at the Northern Computer Fair.

Name \_\_\_\_\_

Position \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

Telephone No. \_\_\_\_\_

Return to: The Exhibition Sales Manager,  
The Northern Computer Fair, Room L310,  
Quadrant House, The Quadrant House, Sutton,  
Surrey SM2 5AS.

## Kempston Micro Electronics Stand No: 135

Unit 30, Singer Way,  
Woburn Industrial Estate,  
Kempston,  
Bedfordshire MK42 7AF  
Tel: (0234) 856633  
Sales contact on stand:  
Jane Mosley

Kempston Micro Electronics are displaying a full range of peripherals for home computers. The highly acclaimed range of Competition/Pro joysticks will be available at special exhibition prices. These start with the Competition/Pro 1000 with basic features, to the Competition/Pro 5000 joystick. These joysticks work with any Atari/Commodore home computer and with the Kempston Joystick Interface. They also work with the best-selling ZX Spectrum. Kempston also offer a range of conversion tapes for some popular games which give joystick control on the ZX Spectrum.

For the more serious-minded ZX Spectrum owner, the two Kempston Centronics Interfaces will be displayed - Interface S and the new Interface E which incorporates all

operating commands in its own EPROM.

With these Interfaces the Spectrum can be used for word-processing, home accounts, filing, etc, in conjunction with any Centronics standard printer, i.e. dot matrix up to letter quality daisywheel printers. Come along to find out the latest exciting developments that Kempston are involved in.

Zx Microcentre,  
17 Sweeting Street,  
Liverpool 2  
Tel: (051) 709 9280  
Sales contact on stand:  
Roy Backhouse

## Mastertronic Stand Nos: 842/844

48 George Street, London W1  
Tel: 01-935 4944  
Sales contact on stand:  
A Sharam

## Datasoftware Stand No: 637

8 Portland Road, Holland Park,  
London W11 4LA  
Tel: 01-221 1473  
Sales contact on stand:  
Charles Anthony

## Specialised Education Software Services Stand No: 760

Central Trading Estate,  
275/277 Bath Road,  
Bristol BS4 3EH  
Tel: (0272) 710103  
Sales contact on stand:  
David Jupp

## Fuller Micro Services Stand Nos: 669/671

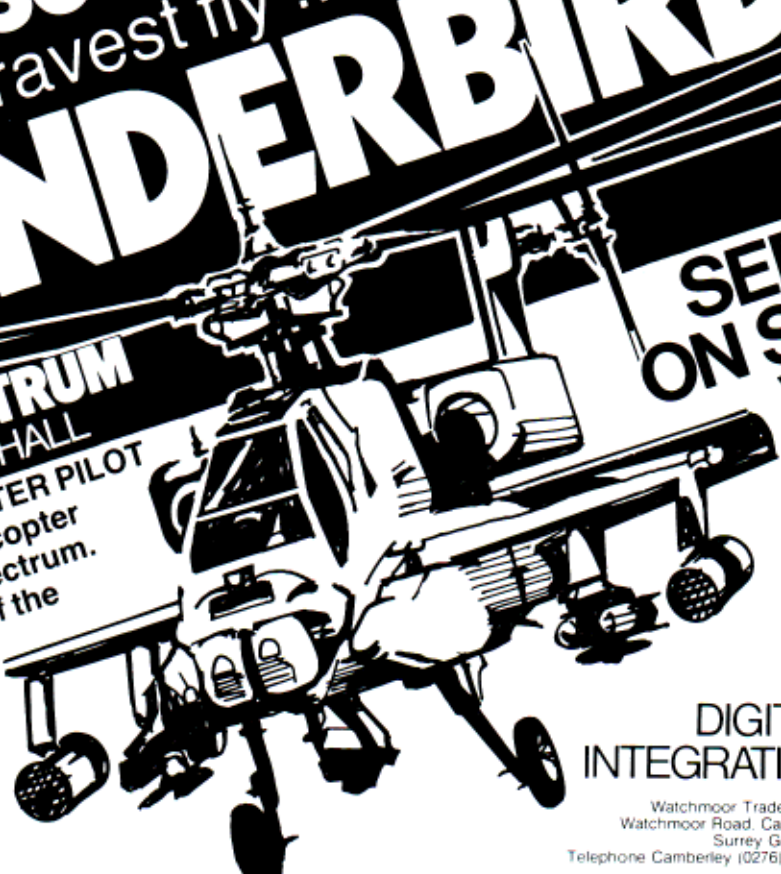
**COMING SOON!**  
Only the bravest fly .....

# THUNDERBIRD

**SEE US  
ON STAND  
V55**

**48K SPECTRUM  
BY D.K. MARSHALL**

From the author of FIGHTER PILOT  
... the first authentic helicopter  
simulation for the ZX Spectrum.  
Climb into the hot seat of the  
meanest, deadliest  
combat helicopter ever  
to rule the skies ...!



**DIGITAL  
INTEGRATION**

Watchmoor Trade Centre,  
Watchmoor Road, Camberley,  
Surrey GU15 3AJ  
Telephone Camberley (0276) 684959

# CLUBS

**The Amateur  
Computer Club**  
Stand No: C4

**The Association of  
Computer Clubs  
(ACC)**  
Stand No: C2

**The Association of  
London Computer  
Clubs**  
Stand No: C6

**British Apple  
Systems User  
Group (BASUG)**  
Stand No: C3

**Clubspot**  
Stand No: C7

89 Mayfair Avenue,  
Worcester Park,  
Surrey KT4 7SJ  
Tel: 01-337 3747  
Sales contact on stand:  
Len Stuart

**Croydon  
Microcomputer  
Club**  
Stand No: C8

**Forth Interest  
Group (UK)**  
Stand No: C11

**Independent  
Commodore  
Products User  
Group (ICPUG)**

Stand No: C1

**Independent QL  
User Group/  
National TRS &  
Genie User Group**  
Stand No: C5

**The 68 Micro  
Group**  
Stand No: C9

41 Pebworth Road,  
Harrow HA1 3UD  
Tel: 01-422 4724  
Sales contact on stand:  
Jim Anderson

**Thor Computer  
Software**  
Stand No: 839

Erskine Industrial Estate,  
Liverpool L6 1AP  
Sales contact on stand:  
Paul McKenna

# micro business

# micro business

# micro business

# micro

is the only trade magazine uniquely poised to link manufacturers and distributors with retailers . . . is produced from the same stable as Practical Computing, Computer Weekly, Systems International, Electrical and Electronic Trader, Electrical and Radio Trading and Your Computer.

Thus the Micro Business controlled circulation reader list has been culled from the widest of sources to include potential as well as existing retailers. It is a readership which is absolutely vital to micro manufacturers who need to reach retailers and dealers effectively without wastage.

Take full advantage of this growing market by promoting your products in

# micro business

For immediate action call Kenneth Walford on

## 01-661 3139

HOVER BOVVER, REVENGE  
AND NOW

# SHEEP IN SPACE



**Llamasoft**

AWESOME GAMES SOFTWARE

SL

THE LATEST CBM 64 WORK BY JEFF MINTER AVAILABLE FROM LLAMASOFT

LLAMASOFT SOFTWARE, 49 MOUNT PLEASANT, TADLEY, HANTS, ENGLAND.



# Ocean rules the waves!

The chart-toppers in computer games  
bring you their latest batch of hits. . .  
See us on stand 442/444.

**ocean**